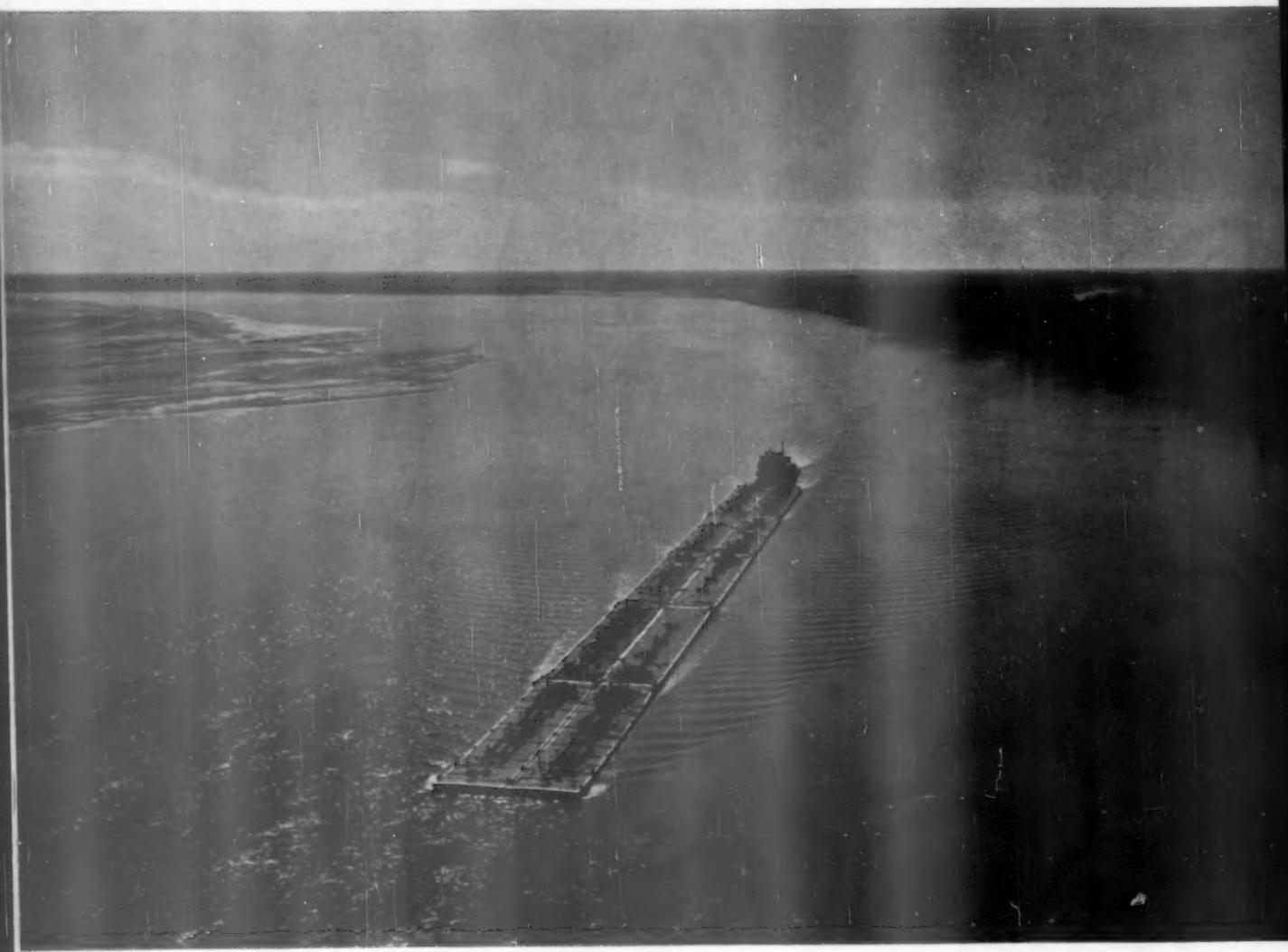


Nation's Business

A MAGAZINE FOR BUSINESSMEN

MARCH 1954



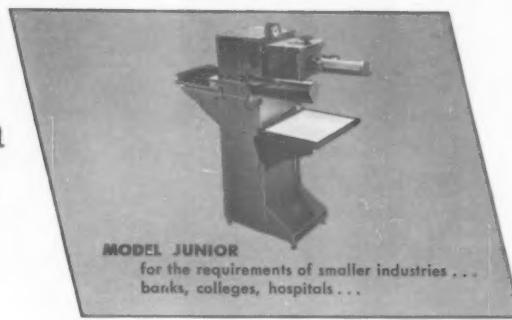
Waterways' load: biggest in history PAGE 34

We are wasting our urban wealth PAGE 32

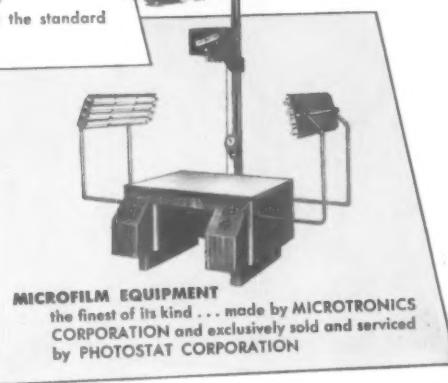
Indiana's revolt—what's happened since PAGE 23

You can always rely on
PHOTOSTAT
(REG. U. S. PAT. OFF.)

*the most valued name in the
photographic copying field*



STANDARD MODEL
the model which has long set the standard
for photocopying



For over 40 years, PHOTOSTAT CORPORATION has manufactured, sold and serviced the finest of photographic copying equipment and supplies. They have been continuing years of successful service to American business and the varied requirements of Federal, State, County and Municipal governments, coast to coast.

Today . . . more than ever before . . . PHOTOSTAT CORPORATION stands ready to serve you with photographic copying apparatus and material of the very highest quality. From the small Instant Copier to the large, completely automatic continuous models, you can be properly equipped to handle your particular needs most efficiently and economically with the

same permanent, errorless copies . . . erasure-proof, water-proof, and fraud-proof . . . that set the standard of good photographic copying the world over.

Yes . . . the trade-mark "PHOTOSTAT" . . . wherever you see it . . . means the most efficient equipment and supplies for copying *anything* and *everything* that is written, printed, drawn, typewritten, blueprinted or photographed.

We will welcome the opportunity to confer with you on your copying problems and to make specific recommendations as to how you can best solve them . . . with worthwhile savings in time and money.

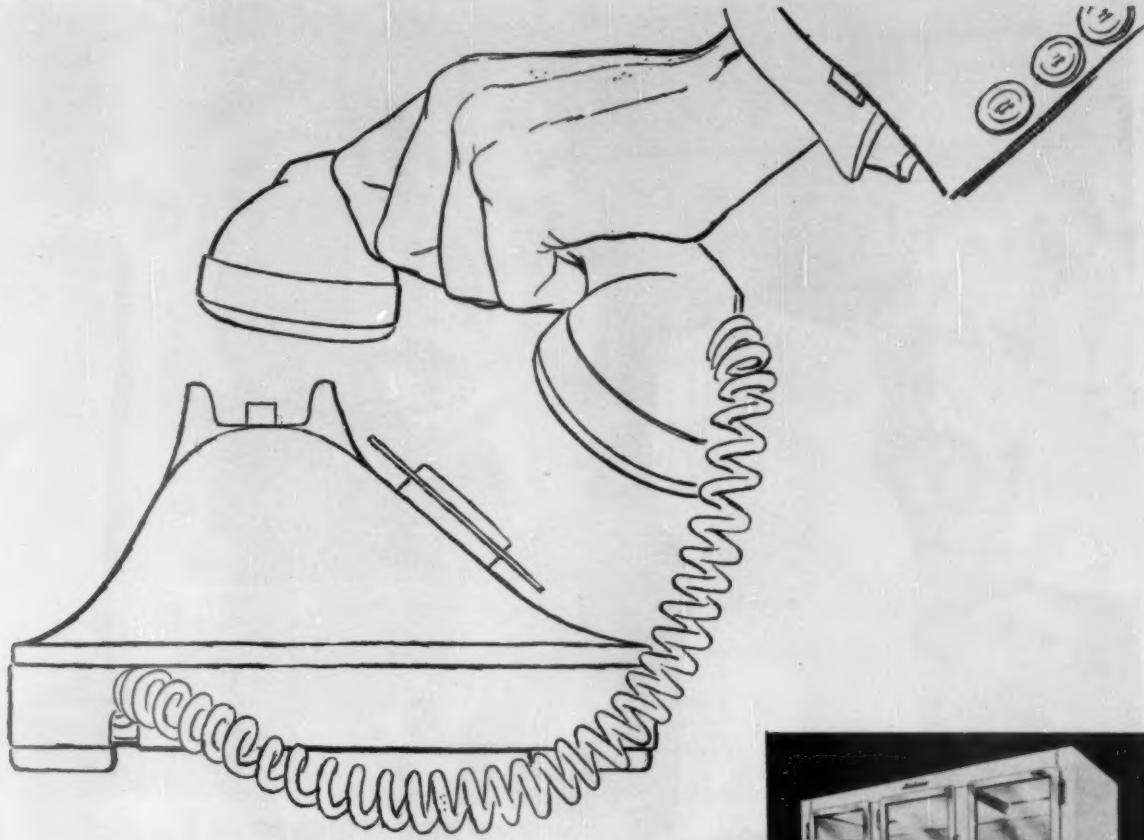
PHOTOSTAT is the registered trade mark
for PHOTOSTAT CORPORATION

Write us for further information

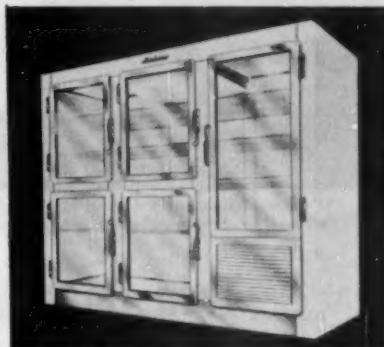
PHOTOSTAT CORPORATION

297 STATE STREET, ROCHESTER 14, NEW YORK

Service offices in most principal cities and in Canada



the best solution to refrigeration problems...



A simple phone call will place at your disposal the broad experience and technical know-how of your local distributor of McCray Commercial Refrigeration.

Almost daily, your McCray Distributor meets and solves an endless variety of refrigeration problems. Bakeries and florist shops . . . drug

stores and restaurants . . . hospitals and schools . . . are just a few of the many businesses and institutions in your town which benefit from McCray installations.

McCray reach-in refrigerators, freezers, walk-in coolers, condensing units and display cases are built in such a wide variety of specialized

models and sizes, that almost every business or professional need can be met with "standard" equipment.

McCray quality is a byword in the refrigeration industry. Yet you pay no premium for this assurance of lasting satisfaction.

Call your local McCray Distributor (look in classified) or use the coupon.



Everything in
Commercial Refrigeration
McCray Refrigerator Company, Inc.
Kendallville, Indiana

McCray Refrigerator Company, Inc.
3426 McCray Court
Kendallville, Indiana

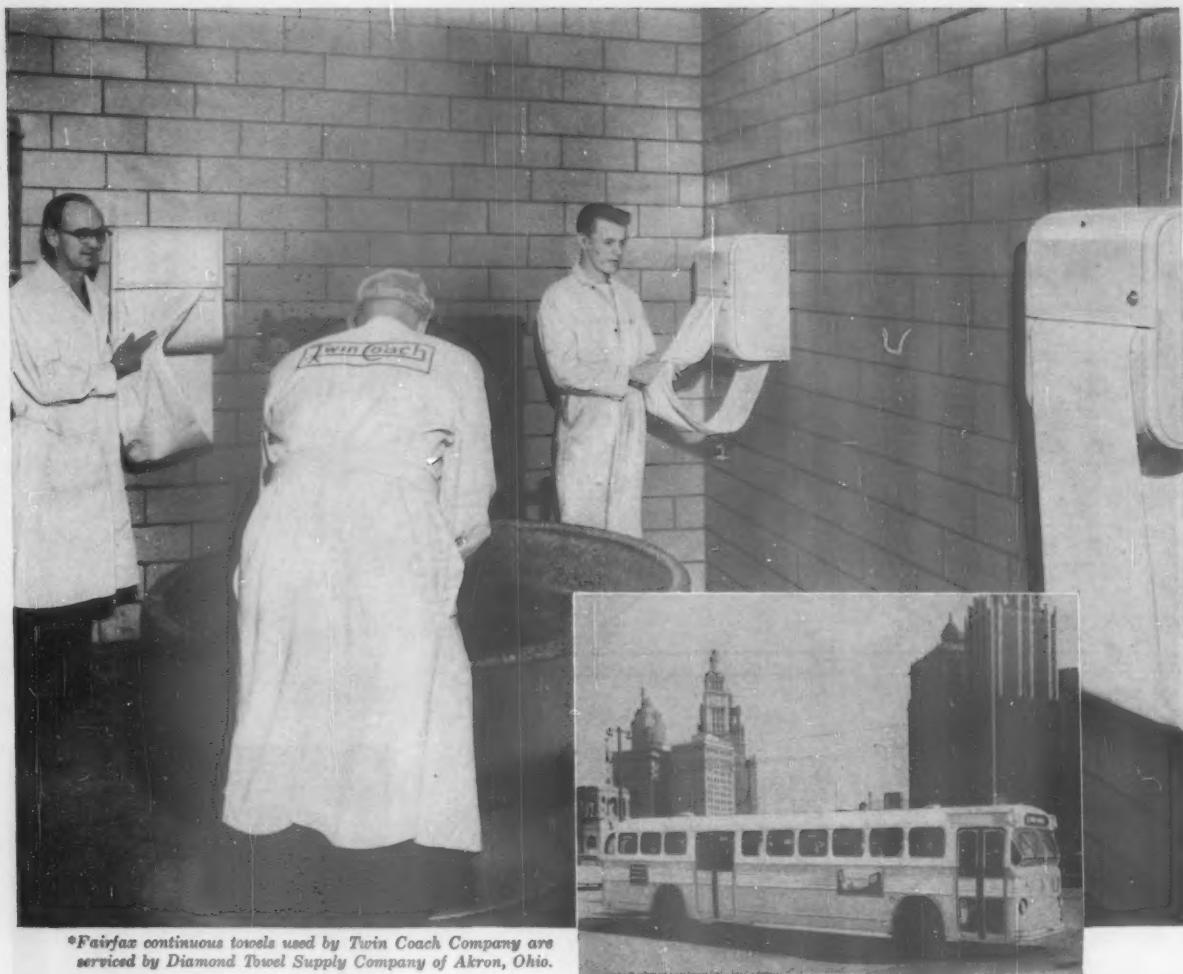
Please have your factory-trained distributor call on me. I understand this places me under no obligation whatsoever.

My name . . .

Business . . .

Street & No.

City & State



**Fairfax continuous towels used by Twin Coach Company are serviced by Diamond Towel Supply Company of Akron, Ohio.*

Twin Coach Installed Cotton Towels* to Eliminate Fire Hazard and Keep Washrooms Tidier



Here's How Linen Supply Works ...

You buy nothing . . . your linen supply dealer supplies everything. The low cost includes cabinets, pick-up and delivery, provides automatic supply of freshly laundered towels and uniforms. Quantities can be increased or decreased on short notice. Local service is listed in your classified book under SERVICELINEN, LINEN SUPPLY or TOWEL SUPPLY.

• The Twin Coach Company, Incorporated of Kent, Ohio, is the world's largest builder of city buses powered by propane gas. This company supplies buses to transit companies throughout the world. Pictured above is one of their latest models built for the Chicago Transit Authority. The company is currently celebrating its 25th Anniversary. Management changed over to cotton towels to eliminate fire hazard . . . tidier washrooms were the end result at lower cost to the company. Twin Coach employees are happier, too, with the greater comfort of soft, absorbent cotton towels.

Whatever your towel problem . . . whether you operate a factory, institution, office or store . . . you can be sure that soft, gentle, absorbent cotton towels will do the best job in promoting employee morale, building customer good will, increasing tidiness in your washrooms and cleanliness among your employees. Cotton towel service is economical, it's efficient and it's a sign of good management.

Clean Cotton Towels . . . Sure Sign of Good Management

A PRODUCT OF WEST POINT MANUFACTURING CO. • WELLINGTON SEARS CO., SELLING AGENTS, 65 WORTH ST., NEW YORK 13

Nation's Business

MARCH 1954 VOL. 42 NO. 3

PUBLISHED BY CHAMBER OF COMMERCE OF THE UNITED STATES

Editor Alden H. Sypher	7 Management's Washington Letter
Adm. Assistant Ruth D. Howard	10 Letters to the Editor
Executive Editor Paul McCrea	12 By My Way R. L. Duffus
Associate Editors George Haddock Kenneth W. Medley Donald C. Spaulding Elizabeth B. Coleman Paul Hencke	15 The State of Being 60 Felix Morley
Art Director Ralph Patterson	19 Washington Mood Edward T. Folliard
Adm. Assistant Mary W. Davis	23 Indiana's Revolt—What's Happened Since Craig Thompson
Associates Asdur Takakjian Charles Dunn	29 Proposals: More Coverage for More People
Business Manager John F. Kelley	30 Here's How Social Security Grew
Asst. Business Manager William W. Owens	32 We Are Wasting Our Urban Wealth Miles L. Colean
Circulation Manager Floyd C. Zeigler	34 Waterways' Load: Biggest in History Laurence Greene
Advertising Director Andrew Mawhinney	38 Brilliant Boss of Atom's Future Louis Cassels
Advertising Manager David Hyde	40 How's Business? A Look Ahead
Western Advertising Mgr. Ray Orwig	42 It's Better Business to Investigate First Don Wharton
Production Manager W. Lee Hammer	48 High Vacuum Does the Incredible O. A. Battista
	50 Toll Road Boom: 10,000 Miles for \$10,000,000,000 Henry K. Evans
	54 Overhead Keeps Power Lines Overhead Murray Teigh Bloom
	64 Rain Making Becomes a Science—and a Problem Rayy Mitten
	84 Exotic Fruits Challenge Old Favorites Helen Muir
	94 Buying in Europe Trims Our Arms Bill Clarke Newlon
	105 NB Notebook
	108 First Requisite of Good Citizenship

MORE THAN 750,000 SUBSCRIBERS



GENERAL OFFICE—U. S. Chamber Building, Washington 6, D. C. BRANCH OFFICES—New York, Chicago, San Francisco, Cleveland, Detroit.

As the official magazine of the Chamber of Commerce of the United States this publication carries notices and articles in regard to the Chamber's activities; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.

Nation's Business is published monthly at 1615 H St. N.W., Washington 6, D. C. Subscription price \$18 for three years. Printed in U. S. A. Entered as second-class matter March 20, 1920, at the post office at Washington, D. C.

Nation's Business is copyright, 1954, by the Chamber of Commerce of the United States.



"This is my Dad"

...will he say it with pride?

THERE'S nobody quite like "dad" in the eyes of your little boy. You can fix his boat and answer his questions and tell him wonderful stories. He thinks you're the greatest man in the world.

But have you ever paused to consider how he may feel about you in the years ahead?

Some day he'll go to college, and you'll visit him. The fathers of the other boys will be there. One may be a well-known industrialist; one a successful banker . . . a broker . . . a production executive.

How will he feel when he introduces you?

When he says, "This is my dad"—will he say it with pride?

We do not claim that the earning of money is the only obligation of fatherhood; or even the principal one. But it is important. You want your children to have the kind of home and the advantages that will give them a good start in life.

That takes money . . . more money than ever before. And as the cost of living rises,

your responsibility to make more money also rises.

Perhaps we can show you how to keep pace with that responsibility.

FREE . . . "FORGING AHEAD IN BUSINESS"

In our more than forty years of practical experience in helping men to help themselves in business and industry, we have never found a magic key to success; but we have developed a program of executive-training so complete and scientific that each day carries subscribers closer to their chosen goal.

That program is described and explained in "Forging Ahead in Business"—an interesting 48-page book which has sparked thousands of men to better jobs and bigger salaries. If you're looking ahead and want to move ahead, this little book will contribute to your thinking. It is sent free, and without obligation, to all men who are genuinely concerned over their business futures. To obtain your copy, simply fill out and return the coupon.



ALEXANDER HAMILTON INSTITUTE
Dept. 248, 71 West 23rd Street, New York 10, N. Y.
In Canada: 57 Bloor Street, West, Toronto, Ont.

Please mail me, without cost, a copy of the 48-page book—
"FORGING AHEAD IN BUSINESS"

Name

Firm Name

Business Address

Position

Home Address



ABOUT THIS ISSUE

THIS MONTH'S cover is an aerial photograph of a Mississippi River towboat near Angola, La.

The man behind the camera was **CHARLES E. ROTKIN**, director of a New York firm specializing in industrial photography.

Mr. Rotkin has long been interested in low-level aerial photography. Our cover photo, made while he was on assignment for the Standard Oil Company of New Jersey, is typical of this relatively new technique.

The first low-level aerial work ever attempted by Mr. Rotkin came after World War II while he was working for the Puerto Rican government as chief of the Department of Photography. Recalling that experience, Mr. Rotkin writes:

"The photographic program for the government of Puerto Rico required our flying low in open areas to get an intimate picture of the terrain, the farms and the people who lived on them, as well as for other utilitarian purposes such as housing surveys, communications, etc."

The towboat's importance in today's transportation picture is described in **LAURENCE GREENE'S** story which begins on page 34.

MILES LANIER COLEAN in this issue writes with authority on a problem confronting many American cities—deterioration of buildings.

A foremost consulting economist, Mr. Colean also is one of the nation's outstanding thinkers in the field of housing and urban renewal. He has written extensively on problems of construction and slum clearance. His latest contribution to the literature in this field is "Renewing Our Cities," published last year by the Twentieth Century Fund.

In 1953 Mr. Colean served as a member of President Eisenhower's Advisory Committee on Government Housing Policies and Programs. In addition, he is a member of the Advisory Board of the Institute for Urban Land Use and Housing Studies of Columbia University and the Building Research Advisory Board of the National Research Council.

Mr. Colean is a fellow of the American Institute of Architects and is a former assistant administrator of the Federal Housing Administration.

A native of Peoria, Ill., he obtained a bachelor's degree in architecture from the University of Wisconsin in 1917 and did advanced study at Columbia University. He has been a consultant on construction and building finance since 1944.

Mr. Colean maintains his home and office in Washington, D. C.



BENEATH THE BROAD ATLANTIC

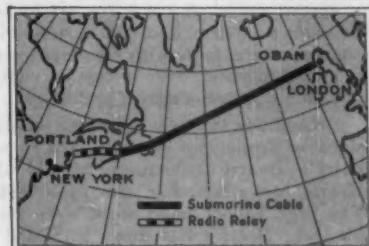
*your voice will travel the world's
first transoceanic telephone cable*

A dream almost as old as the telephone itself is moving toward reality today. Work has begun on a 2000-mile voice cable that will cross "the mountains beneath the sea" to connect the United States and Canada with the British Isles.

Through it you will speak to Europe as easily and clearly as you talk to a business associate across town. Amplification for your voice will be accomplished about every 40

miles by vacuum tube repeaters built into the cable and designed to operate continuously for many years.

The new cable will cost about \$35,000,000 and will be a joint project of the Bell System, the British Post Office, and the Canadian Overseas Telecommunications Corporation. On its completion, in 1956, it will have three times the capacity of present radiotelephone circuits between New York and London.



General route of the new transatlantic telephone cable system. Conversations and radio programs will travel a new Bell Radio Relay route to Nova Scotia, and then will go through cable to Newfoundland and Great Britain.

Many years of telephone research and development have brought the cable into being. Telephone men and women, telephone investors, and the American people can well be proud of this giant stride forward in the continuing job of providing ever better telephone service.

BELL TELEPHONE SYSTEM



What is there about Wausau, Wisconsin, that makes it the ideal home, for one of the world's most important insurance companies?

Employers Mutuals of Wausau invited a Chicago newspaper columnist to visit its hometown and find out.



Wausau Story

By PHIL HANNA, Business Columnist of The Chicago Daily News

THE conductor on the train knew Wausau. "Good town," he said. "Wausau people are like Texans—they wouldn't want to live anywhere else."

I soon began to see why. My first visit was in Anton Paszek's barber shop. "We're too big now," said Anton, "for everyone in town to know everyone else. But you won't find many places that beat Wausau for people *liking* each other and giving each other a hand."

At Ploss' Drug Store, Baumann's Hardware, everywhere I went, I heard more about the good spirit of this city.

Even the "coffee break" in Wausau is a special thing. A company president, or even a chairman of the board, will sit around the table with his employees, relaxing together over a cup of coffee and talking over common problems.

I heard one story that gave me a good slant on Employers Mutuals. The Company's Board Chairman, Mr. H. J. Hagge, had a birthday some time back. The high school band went over and played "Happy Birthday To You!" under his window. That means to me that Mr. Hagge must be a good person to know. And it means that this company he has headed for many years must be a good one to do business with.

It's only natural that Employers Mutuals would take on some of that "Wausau Personality" I found everywhere on my visit. Business is people—and Wausau people are the right kind.



Mr. Hanna drops into Ploss' Drug Store, talks with George Marsh (at cash register) and H. W. Genrich. On his visit to Wausau, Mr. Hanna went about freely, on his own, with a photographer.

Employers Mutuals of Wausau are "good people to do business with."

There's a little bit of Wausau on the sidewalks of New York—and in 88 other cities where this Company has offices. We write all lines

of fire and casualty insurance—everything but *life* insurance. Our largest line is workmen's compensation. We have two reputations, born and raised in Wausau, that we aim to hold. *The first* is that we'd rather prevent than just pay for an accident. Our

accident-prevention program, second to none, means lower insurance costs to policyholders. *The second* is claim service. Handled direct by our branches, this service is unexcelled in the insurance field for care and fairness, with a signal record for prompt payments.

Employers Mutuals of Wausau



► TAFT-HARTLEY ACT may get new name—but that's about all.

The name: Smith-McConnell Act of '54; it's due to emerge from joint Senate-House talks starting this month.

As for changes, you'll hear plenty of public clamor, lots of heat, little more light.

Private talks with labor, management, congressmen, yield few signs of action. Why?

Political thinking's already "back home," keyed to November.

President won't press for revision. It's only one of many issues in his program.

Labor's stepping up assault on proposed changes, may settle for T-H as it stands rather than have what it terms "worse" law.

Changes will come at administrative level.

It's important to you as a businessman to understand how.

Policy's formed on level of National Labor Relations Board, Federal Media-tion Board, industry fact-finding, arbitration groups.

And that's where you find new names, new faces. They are Eisenhower appointees.

They're forming policy, deciding cases now.

► BANKS STEP UP their sales job.

That's evident from hike in public relations, advertising budgets.

What's behind it?

Bankers foresee easing loan rates, take tip from chain stores in effort to boost volume.

First they need more deposits—from which to make loans.

Example: Eastern bank mails out 200,000 savings pass books, credits recipient with \$1 if he opens \$10 savings account.

Result: New accounts total \$338,000, grow daily.

► WATCH FOR MORE—and bigger—loans by Small Business Administration.

It's key agency in Administration's anti-recession program.

Your business can get help—if you need it—and if you stay on top of

fast-breaking news coming from SBA.

Remember:

Agency now has more than 1,000 small firms lined up for loans.

They can do \$120,000,000 in defense business. SBA hopes to double that by June.

Retailers, wholesalers can get non-defense loans.

Agricultural loans may be made to help Commodity Credit Corporation cut costs.

SBA has lent \$2,200,000-plus (latest figures), can boost that to \$15,000,000 in next few months.

Note: Limitation of \$150,000 on individual loans will be dropped if business activity dips.

► HOTELS GET LIFT from growing competition for consumer dollar.

It doesn't appear on the surface, but here's how it works:

Businessmen plan more conventions to pep up sales, exhibit new products.

They want to lure buyers, public, get the best they have to sell out front fast.

What happens?

Cash registers jingle merrily in hotels, restaurants, other personal service establishments where conventions gather.

Examples: Chicago, host to three simultaneous conventions, had 20,000 rooms for 30,000 visitors.

More than 15,000 buyers moved in and out of New York City in January '54.

Philadelphia's hotel trade's up 5 per cent over same period in '53.

► BUSINESS FAILURES—are they up or down?

In amount of liability, up.

In relation to value of national product, down.

Liabilities totaled \$350,000,000 in '53, highest in 20 years.

But how about national product?

Losses in '53 represent \$1,000 for every \$1,000,000 in goods and services produced.

In '49, ratio was \$1,200 loss for each \$1,000,000.

In '33, ratio was \$8,000.

Net effect: Ratio of loss drops as

national production is rising.

Keep in mind:

New business formations are booming. Since end of War II, population's up 15 per cent.

New businesses? Up 30 per cent.

The figures: In '45, one firm for every 45 persons; today, one for every 38.

► **EMPLOYMENT'S DUE** to go up this month—and so is unemployment.

Keep your eye on the figures. You'll find disputes over "rising joblessness" reflect political bias.

Some take gloomy view:

Labor surplus areas outnumber "tight" areas two-to-one (latest Census Bureau report).

Unemployment's highest in three years (about 3,000,000).

Note: Rise may show up this month as result of expanded sampling base Census Bureau has adopted.

Average monthly unemployment as percentage of total labor force is lowest since start of Korea war.

The figures: In '53, unemployment, 2.4 per cent of labor force (about 63,000,000); in '50, 5 per cent (with size of labor force slightly less).

Note, too: Industry plans capital outlay of about \$26,000,000,000 this year.

While much of this may go for replacement, there's a big new job potential in the figure.

Industry estimates average cost of providing new job at about \$11,000.

And business outlay doesn't count in planned public works, sales, distribution and other jobs stemming from expansion.

► **YOUR WORKERS' IDEAS** can help you improve your product, cut costs.

That's simple. But it's often overlooked.

Talks with top industry executives indicate the old "suggestion box" is due for a big revival in '54.

The reason?

Management and labor are in the competitive struggle together—not against each other.

Companies, nationwide, receive more than 1,000,000 ideas a year. One out of

four of these suggestions is adopted.

Workers' bonuses: \$7,000,000 in '53.

Note: Suggestion system operates in 8,000 firms now.

► **WHY DO PEOPLE BUY?**

You'll spot some obvious answers right away, probably won't be right.

Why?

The customer himself doesn't know.

That's conclusion of auto manufacturer. He asked prospective buyers points they considered most important. Answers: 1. Economy, 2. Comfort, 3. Style.

Same manufacturer asked same people after they bought what they considered important. Answers: 1. Style, 2. Comfort, 3. Economy.

► **SMALL FAMILIES** are big business.

Growth of family formation outruns population increase.

There are more small families formed each day. More third and fourth children are born, too.

One hundred families of three persons each buy more of many items than 60 families of five persons each—even though 300 people are involved in each case.

What do they buy?

Forty more homes, 40 more cars, 40 more refrigerators, stoves, dishwashers, vacuum cleaners, lawn mowers, other appliances.

Over-all, both groups need as much food, clothing.

Note: Keep your eye on family formation figures. They can be a profitable hint to your sales force.

► **NATIONAL DEBT** burden declines.

It's still high—more than \$7,500 for each American family—but in relation to national income, picture's improving.

The figures:

In '45, debt as per cent of income, 152.5; today, less than 85 per cent.

Debt in past decade: Up from \$202,-600,000,000 to \$274,900,000,000.

Income: Up from \$165,900,000,000 to \$284,300,000,000 (annual rate).

If federal debt stays within \$275,-000,000,000 limit and income rises 1.7 per cent a year for 27 years, debt

MANAGEMENT'S

washington letter

burden will be back at 55.8 per cent of income—where it was at end of '41.

► LIFE INSURANCE men step up sales drive.

There's good reason:

While more people bought more insurance in '53 than any year in history (almost \$40,000,000,000 worth), ratio of new purchases to personal income is still under 6 per cent.

That was average for 1932-1941.

Result: Top insurance men see plenty of room to sell, boost figure to savings-income ratio (about 7.2 per cent).

Note: With funds available for investment totaling \$15,000,000,000, insurance firms are one of biggest private capital sources in U. S. economy—and can be bigger.

► AXIOM: If you want to sell, you have to know where the money is.

Here's brief summary. You may want to clip it out for reference.

Money in circulation runs at about \$30,000,000,000.

That's roughly \$770 for each U. S. family in a credit-based economy.

How's it distributed?

1. Less than 9 per cent of families have income less than \$1,000 a year (it was 53 per cent 15 years ago).

2. 13 per cent earn from \$1,000 to \$2,000 (31 per cent in '39).

3. 17 per cent earn \$2-3,000 (9.7 per cent in '39).

4. 35 per cent earn \$3-5,000 (40 per cent in '39).

5. 27 per cent more than \$5,000. It was 2.3 per cent in '39.

Money in circulation, '39: less than \$5,000,000,000. Per capita, that's about \$41.

Today, per capita: about \$200.

Let your sales force take it from there!

► PRICES WILL BE shaved soon—but not much.

And chances are they'll level off—even score a rise by midyear.

Reason's twofold: Growing competition in every line (and at all price levels), plus stepped-up effort to cut inventory.

Latter's about run its course.

Started last October, mainly in durable goods lines.

But spring trade has filled up soft goods shelves.

Meanwhile, price cuts already listed have brought brisk activity to retail counters.

That, plus special bargains, tie-ins, is pulling the inventory-sales ratio back into line.

Manufacturers in all lines are watching personal income figures as first quarter of '54 nears end.

Disposable cash (after taxes) runs at about \$250,000,000,000 annual rate, despite some factory overtime cuts, scattered layoffs.

The way sales management sees it:

If spending power stays up, price-cutting plans will fade.

► BRIEFS: Proportion of gainfully employed in total population is 41 per cent, highest in country's history.

... National Association of Home Builders points out huge home market among Korea vets: 2,000,000 have returned to civilian life, more are due back soon—and few have bought homes.

... During past 40 years, general employment has jumped 63 per cent. White collar workers have increased 183 per cent. ... If you have a new product, better plan how to introduce it to public. One agency finds 95 per cent of new consumer products fail within two years. ... Noticed your used car lots lately? There's less and less "showmanship," more salesmanship—less flummery, more facts. ... You can expect discount houses to form trade association soon—and then fireworks on "fair trade" will really get under way. ... Some Pennsylvania gasoline retailers open "Project Card"—mailing postcards to White House protesting "price cuts, gallonage rebate." Small business sufferers, retailers say. ... Why's the stock market on the upside? It may be forecasting, but experts say it's just reflecting "friendlier" treatment from Uncle Sam, taxwise. ... Why do workers lose jobs? Mainly because of inability to get along with other employees, lack of imagination, Harvard study finds. Minor reason: Incompetence.

Is this your heating problem?



"The Profit-Eating Heating Bill"

Now... Stop profits from being gobbled up by outmoded heating systems in your plant!

New THERMOBLOC Heating for Industry

Needs no costly pipes, ducts, radiators, installations. Direct-fired, self-contained Unit Heaters heat even coldest spots in minutes with less fuel! Ideal for large open areas, eliminates work slowdowns due to cold corners. Thermoblocs are reducing costs, improving heat in hundreds of plants, warehouses, etc., today. See how Thermoblocs can solve the "profit-eating heating bill" in your plant, too!

How THERMOBLOCS

Cut Costs

Cost less to buy and install. Fully automatic, require no attendant. Heat circulates directly at working level, no fuel lost to high ceilings. Operate independently, start up only those units needed.



Give Ideal Heat

Forced circulation of live warm air assures instant, uniform heat even in large unpartitioned areas. High efficiencies assured, using gas or oil. Connect to fuel and power line and start heating. Beautifully styled.

Protect Equipment

Uniform, dry heat safeguards perishables, prevents rusting of delicate machinery.

For complete details on how to solve your heating problem, write for New Executive Bulletin on THERMOBLOC today.

THERMOBLOC DIVISION

PRAT-DANIEL CORP.

Manufacturers of the well-known P-D Power Plant Equipment

1-3 Meadow St., S. Norwalk, Conn.

PRAT-DANIEL CORP.
1-3 Meadow St., S. Norwalk, Conn.

Gentlemen:
Please send me literature on how to save heating costs with THERMOBLOC.

Name _____ Title _____

Company _____

Address _____

Letters TO THE EDITOR

Merely a memorandum

One of my vocational education friends has just called to my attention that NATION'S BUSINESS published a statement in January to the effect that the Council of State Governments has recommended that federal grants for vocational education to the states be discontinued after July 1, 1955. My information was contrary to this, and upon checking I find that the Council of State Governments officially has at no time considered for action such a matter. This was merely in the form of a memorandum by a staff committee.

I have also noticed recently in several publications some of the anticipated opinions and recommendations of the Manion Committee. It seems to me that too many people in too many places are pre-empting the responsibility given to others by such prejudicial announcements.

WESLEY P. SMITH
State Director of
Vocational Education
Sacramento, Calif.

Difference 17,449,763

"Management's Washington Letter" in January estimates that about 35 per cent of the cars now on the road are more than ten years old, some of them dating back to the early thirties.

If you can give your readers the total production of cars from 1932 to 1944 inclusive, and from 1945 to 1954, your readers can intelligently decide how much value to attach to this estimate.

ARTHUR PRICE
Swarthmore, Pa.

Note: Automobile Manufacturers' Association reports 54,745,000 cars registered in U. S. in 1953. Production, 1943 to 1953 was 37,295,237. Production, 1932 to 1942, was 28,336,090.

Nonfarm income

"Management's Washington Letter" in January says: "Even on large commercial farms more than 25 per cent of income derives from nonfarm sources."

That is surprising. Take a large mechanized cotton farm in Arizona, or in California. What other than cotton and cotton seed is the source of their income?

Are profits from gin plants, oil mills, compresses and warehouses, in which the farms are interested, considered agricultural or farm income? It would be interesting to see the breakdown on your figures.

FLOYD WILLIS
Dallas, Texas

Note: Nathan M. Koffsky of the division of statistical and historical research, U. S. Department of Agriculture, includes in nonfarm income

family members working on nonfarm occupations; services performed as side lines — transportation, marketing, warehousing, crating for other farmers, other types of business; investments in nonfarm enterprises; tax refunds and depreciation allowances; part-time sales and other jobs, even free-lance writing.

Advantageous to everyone

If we could picture every citizen of the United States with a copy of your January number on his desk, note him sitting down and reading each of these reports, which are not long and which give the reader a bird's-eye glance of the problems of the different departments, we would appreciate it. Of course, he might even find some things he would criticize, but what of that. No department could be run perfectly and suggestions would be welcomed.

These men have taken on a big job, some of whom have done so at a great sacrifice, away from their own private business.

The reading of these reports, with a thoughtful mind, would prove very advantageous to every one of us.

CAMPBELL HELTON
Bloomington, Ill.

For Danish archives

I read a request from Svend Waendelin, archivist of the Danish-American Archives, Copenhagen, in which he asked Danish readers to send "any material pertaining to American history and financial and economic conditions in the United States for our American Library." I am not a Dane, but out of gratitude for the cordial welcome given to my daughter who traveled in Denmark last year, I shall be happy to send the Year of Historic Change for their archives.

MRS. MAYNE S. MASON
Montclair, N. J.

Stamps for veterans

In your November, 1952, issue you published a notice regarding our projects for stamps for the veterans in the government hospitals and said appeal brought us wonderful results. We received stamps from all over the United States and also from foreign countries. We are still very much interested in this work and have distributed more than 175,000 stamps to more than 1,000 hospitalized veterans in 24 government hospitals in California, New Mexico, Washington, Oregon, Utah, Colorado, Texas, Wyoming and are making personal visits to the various hospitals in and around San Francisco and the Bay area. Starting the bed patient veterans in a hobby such as postage stamp collecting has

proven beneficial in aiding patients toward recovery because it keeps their minds off their troubles. Visiting the veterans hospitals, our committee sits with these boys for hours and aids them in their stamp collecting. We need all of the foreign stamps, United States commemorative stamps, and all other United States stamps above the common one cent green, two cent red, or three cent purple; and either used or unused. Stamps should be sent to:

Golden Gate Exchange Club

c/o Peter N. Williams,

Stamp Distributor

1150 Divisadero Street

San Francisco 15, Calif.

PETER N. WILLIAMS
San Francisco

The rate on coal

The article "Coal's Outlook: 54 Per Cent More Demand" in *NATION'S BUSINESS* for November states that coal executives feel they have been burdened with an unfair proportion of recent boosts in railroad rates which are 60 per cent above 1939; also that they have been looking into alternative carriers. I suspect that figure came from sheet 37 of the mimeographed report filed Aug. 10, 1953, in Ex Parte 175 where the Commission, after stating the cumulative authorized increases range from 67-70 per cent for a basic rate of \$1.00 per ton down to 24.2 per cent for a basic rate of \$5.00 per ton, went on to say "as estimated by our staff for the United States as a whole, the average cumulative increases since 1946, including the temporary surcharges (in Ex Parte 175), are 59.6 per cent for coal and coke." There were no significant changes in the bituminous coal freight rates from the year 1939 through the first six months of 1946. The series of general increases began on July 1, 1946. As a matter of fact, the actual cumulative increases have been much less than 60 per cent.

On the Norfolk and Western Railway the average revenue per ton per mile on coal increased from 5.68 mills in 1939 to 8.28 mills in the first nine months of 1953, or 45.8 per cent. The average revenue per ton increased from \$1.6323 in 1939 to \$2.2516 in the first nine months of 1953, or 37.9 per cent. The average haul was 287.33 miles in 1939 and 272.05 miles in the first nine months of 1953. Normally ton-mile earnings increase as distance decreases.

For the United States the average rate increased from \$2.23 in 1939 to \$3.2539 in the first half of 1953, or 46 per cent. Unfortunately the ton-mile figures are not available.

W. H. S. Stevens, director of Interstate Commerce Commission's Bureau of Transport Economics & Statistics, with whom I have been in correspondence, says that a correct statement would be that rate increases averaging 60 per cent have been authorized by the Interstate Commerce Commission since June 30, 1946, which estimate is based upon the assumption that the full and complete authorized in-

(Continued on page 100)

Investment in
**DEPENDABLE
MANPOWER**

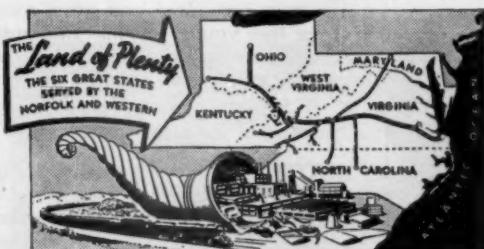
Preferred Stock

... Your Plant in the
Land of Plenty

Workers in the Land of Plenty—skilled, semi-skilled and unskilled—are intelligent, highly adaptable and unusually loyal. Absenteeism . . . job turnover . . . lost-time accidents are low. These people—male and female—have pride in their jobs . . . pride in their communities. They are "home-rooted," here to stay—and their production records show it.

If there's a new plant in your future, then look into this highly productive manpower and the many other compelling industrial advantages offered in the Land of Plenty. Let us give you all the facts—without obligation, promptly, reliably and in confidence.

Write, Wire or Call—
THE INDUSTRIAL AND AGRICULTURAL DEPARTMENT
Drawer NB-637 Telephone 4-1451, Ext. 474
Norfolk and Western Railway
ROANOKE, VIRGINIA



YOUR TRAFFIC MANAGER
is a specialist in transportation, which is a major factor
in plant location. Consult
your traffic manager about
good plant location.

Norfolk and Western
RAILWAY

It pays 2 ways to use PRINTED Sealing Tape



Advertises
your
business

For the retailer, Itstix Printed Tape is an effective, low-cost method of advertising. It constantly promotes your business from the time a package leaves your store until it arrives home with the customer. And because you can seal packages faster with Itstix, you save time and give your customers better service.

If you're a manufacturer, Itstix Printed Tape also "padlocks" your package against pilferage and tampering. When you seal with Itstix, packages cannot be retaped without detection. Users are able to reduce losses through pilferage over 90%.

Only Nashua makes both gummed tape and moistening machines for package sealing. There is a Nashua tape moistening machine for every type of business. Write for Printed Tape folder, and complete information about Nashua industrial and retail machines, prices, and 10-day free service trial.

Mail Coupon Now!

NASHUA

Nashua Corporation

Nashua Package Sealing Division
DEPT. R-3, 44 FRANKLIN STREET
NASHUA, NEW HAMPSHIRE

Please send me your free folder and information about Nashua moistening machines and your 10-day free service trial.



Name _____

Firm _____

Address _____

City _____

State _____

R. S. Duffus

BY MY WAY



March and its ides

I SUPPOSE most of us who haven't been studying the ancient Roman calendar recently would say that March is the only month that has ides. A person might get that notion after reading Julius Caesar, and it might make him gloomy and depressed, because it was on the Ides of March, or March 15, that Caesar got stabbed so often and so fatally. The truth is that every month in the Roman calendar had ides. In March, May, July and October they came on the fifteenth, in other months on the thirteenth. They never did anybody any harm in modern times until, by accident, they came to be associated, in the month of March, with the federal income tax. But I never thought that too bad. I would much rather be an American citizen and pay a tax than be Julius Caesar and be stabbed. I believe Caesar would have said the same thing, if asked.

And so comes spring

I HAVE been informed by a friend of great learning and astuteness that spring this year will begin at 10:54 p.m. on March 20. I don't know whether to sit up for it or not. But I already knew when the real spring, as distinguished from the calendar spring, would begin. It begins, every year, on the day when young lovers go walking hand in hand in the park (or anywhere else) and when some of us less young mortals find ourselves humming old songs and getting back late from lunch.

Sulphur 'n' molasses

ANOTHER sign of spring used to be when one's parents brought out a mixture of sulphur and molasses and urged their offspring to take a large spoonful of it after each meal. Since some of us who did this lived to grow up and become useful and law-abiding citizens, this horrid dose can't have been poisonous. I wonder if this still goes on. I am inclined to believe

that modern children get their sulphur and molasses in the form of capsules. Perhaps that is why they don't have strong characters—like mine, for example, or those of any contemporary of mine the reader may care to mention.

Poetic justice

THERE is just enough cussedness in most of us to cheer us up when the judge in the traffic court finds a tag on his own car for illegal parking. And we all have just enough of the good old Arabian Nights spirit in us to applaud when the judge



picks up the ticket and fines himself five dollars and costs like the rest of us. Haroun Al Raschid would have done that if he had ever had the chance. Maybe he did when, on one of his nocturnal escapades in Baghdad, he overparked his camel.

The old-fashioned rocking chair

I HAVE a note from that revered friend of my childhood, Persifer K. Singletree of Flint Junction, Vt., conveying a word of wisdom, as always. Persifer says that the modern nervous breakdown came into existence at about the time that the old-fashioned rocking chair practically went out of existence. He is soliciting funds to start a rocking-chair factory and end all this. I wouldn't advise anybody to invest but I think it is a wonderful idea.

On being a plant

A FRIEND of mine suffers from imaginary diseases, though his doctor says he is actually in a state of robust health. He is, in short, a hypochondriac. I pointed out to him how lucky he was that he wasn't a cotton

plant afflicted with boll weevil; a leaf of tobacco suffering from the mosaic disease; an ear of corn with an ache inside caused by the corn borer; or an elm with the Dutch elm disease. But you can't argue with that man. He says he believes plants live lives of pure happiness because they can't worry.

What Mr. Bell overlooked

A LOT of people complain about Alexander Graham Bell because he invented the telephone. I do not share this emotion. I have thought and thought and it seems to me that the main trouble with this instrument is not that it rings when it should not but that it does not always ring when one wants it to, and does not always bring the message one wants to hear. I wonder if the telephone people will some day produce a gadget that will bring in the good news and the kind voice that one so often waits in vain to hear.

The old-style man

I WONDER what became of the old-fashioned man who used to wear a boiled shirt with a collar button and no necktie. I miss him.

Four feet vs gasoline

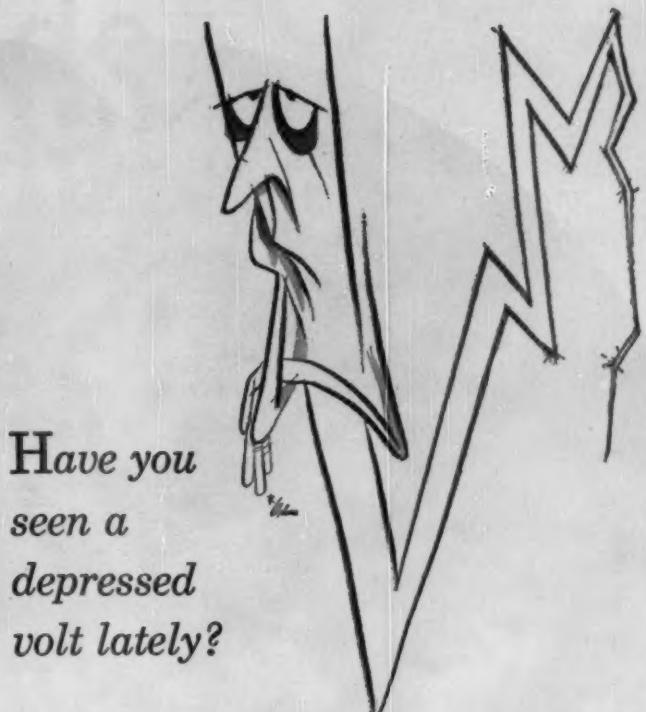
HORSES will continue to be used in the central area of Philadelphia to deliver mail—it has been found that they are faster, under existing traffic conditions, than motor vehicles. On the island of Formosa, as a newspaper photograph shows, bullocks



haul supplies to the American-built Thunderjet fighter-bombers of the Chinese Nationalist Air Force. The bullocks are not as fast as jet planes but they get there. I do not believe these incidents need discourage the makers of motor vehicles or jet planes.

They merely show that for speed you need to have space. It is also true that for space you need speed. Each thing in its place and each to its own uses, one might—indeed, one will—say.

In addition, many of us like horses, even the kind that do not win races or jump fences, and there is something rather appealing about a bullock.



*Have you
seen a
depressed
volt lately?*

There are plenty of them around, even if you haven't seen them. For any conscientious, hard-working "volt" would be depressed by the fact that 90% of electrical circuits in use today won't allow a dollar's worth of power to do a dollar's worth of work. Inadequate circuits make motors loaf, run hot, burn out. Lights operate below par. Control devices overheat, cut out, slow up production. Additional power demand for new equipment may be dangerous or impossible.

In your building or plant, a circuit analysis can measure the power being wasted, what new capacity is needed. You may find that installation of an adequate electrical system will pay for itself many times over. So why not get the competent, unprejudiced advice of your NECA Qualified Electrical Contractor? You can call him with confidence. For whatever your electrical requirements, your NECA Contractor has the facilities, the knowledge, the experience, and the men to do the job.

And he guarantees his work with a written warranty, your assurance of complete satisfaction with both parts and workmanship. Look for his NECA seal in your Classified Telephone Directory.





"LOOK, DAD—POWER BRAKES!"

CHAMP is a big help when I have to stop in a hurry: I just call him and he puts on the brakes!"

In the grown-up world of motoring, good brakes are essential to safety. And, for happy, carefree driving, you need adequate auto insurance with a sound, reliable organization like Hardware Mutuals.

Your Hardware Mutuals representative will help you determine your auto insurance needs, including *safe limits of liability*. He'll also tell you about

Hardware Mutuals *policy back of the policy*® that assures fast, sympathetic day-and-night service wherever you drive in the U.S.A.—plus prompt, fair claim handling. Dividend savings returned to policyholders since organization now total more than \$120,000,000.

Talk to your friendly Hardware Mutuals representative. For his name and address, just *call Western Union*, ask for *Operator 25*. Do it today! It's your first step toward safe, sound protection.



Insurance for your AUTOMOBILE...HOME...BUSINESS

Hardware Mutuals.

Stevens Point, Wisconsin • Offices Coast to Coast

HARDWARE MUTUAL CASUALTY COMPANY • HARDWARE DEALERS MUTUAL FIRE INSURANCE COMPANY

OF NATION'S BUSINESS

Trends

BY FELIX MORLEY



THE STATE OF BEING 60

MY FRIEND'S enthusiasm is infectious and the lunch at which he played host was good. Moreover, the environment helped. In that ornate old dining room, back in 1917, I had met my wife, on a blind date arranged while I was in uniform. On that very site, during an earlier war, Julia Ward Howe had written the "Battle Hymn of the Republic." It was a working day, like any other, and fundamentally a business lunch. But it was also my sixtieth birthday, as I confessed.

"Look here," said my friend, who is a good deal younger, "why not take this afternoon off and put on paper just how it feels to be 60? You seem in the mood. It might be interesting."

That aroused controversy. Birthdays are arbitrary milestones, I said. Once I knew a man whose birthday was Feb. 29. At 60 he called himself 15, and mentally speaking was accurate. In spite of our reliance on statistics, the flow of time cannot be arithmetically spaced. It is like the course of a river, now rapid and turbulent, now slow and tranquil. To look from the bank at any given point gives no idea of the course of the river as a whole, or so I maintained.

"I'm not talking about what you see from your present stance," replied my friend. "I'm talking about how it feels to be 60. Think it over."

And I did, even as the conversation shifted to other topics. My friend, I thought to myself, is on the ball. A sixtieth birthday does give pause, perhaps more so than any other. Therefore it is an opportune moment for reflections. But will they

jell? As I wondered, my mind went back to Julia Ward Howe, rising one early morning in that very hotel and writing, to the tune of John Brown's Body, the stern, uncompromising hymn beginning: "Mine eyes have seen the glory of the coming of the Lord. . . ."

Is that what makes 60 so significant, I asked myself?

• • •

One who was born in 1894 has necessarily seen a great deal, even if he has never moved from the community of his birth. He has, for instance, observed the coming of automobiles and airplanes and has adapted his personal life to the vast changes these instruments have brought. I recall, from my boyhood, the day when our school was let out to watch the first mechanical flight ever made over the city of Baltimore. Our teachers, it was said, were taking no chance of being held culpable if the frail apparatus should crash on the school roof. Now, like millions of others, I find air travel rather boring. There would be more of a thrill in driving a horse and buggy along a country road.

Every generation is to some extent transitional. But those of us who are now 60 and more are especially two-faced. Much more than friends who are only ten years junior, I can remember a mode of life fundamentally different from that of today. Then the telephone was a rarity. Then many business letters were still written and copied in long hand. Then drinking water was boiled, from fear

which both parents and teachers seemed equally relentless. Because one learned the hard way one did not necessarily learn well. My school chemistry told me that the atom was final and indestructible. One spoke of smashing things to atoms, where the real smashing now begins.

The changes that have taken place since 1900 have forced all who have experienced them to keep moving. For that reason, contrary to the general belief of youngsters, no man or woman of 60 is really conservative. Looking backwards, as one does at that age, a certain nostalgia for the relative simplicity of "the good old days" is natural. But very few sexagenarians would turn the clock back if they had power to do so. They have learned to live with modern comforts, and they like them.

What is often called conservatism in the elderly is actually their realization that change is not necessarily progress. Idealistic youth looks at what is and rightly says it should be better. Experience brings a certain cynicism. At 60 one well remembers the wave of enthusiasm when a handful of Bolsheviks overthrew the incompetent czarist tyranny in Russia. In 1917, that change seemed progress. Was it?

The old equation of elders and betters is absurd. If any man is wise at 60 he probably had the makings at 16. But what he certainly should have gained, in the decades granted him, is a basis for comparison. From this he sees that any Utopian solution is likely to be specious and that many proposed reforms, giving more power to assumedly benevolent government, can only lead toward tyranny. If a man at 60 is merely a skeptic his life is meaningless. Usually, however, faith, rather than skepticism, is then growing stronger.

And that would seem to be because, at 60, all men have suffered. Death has claimed many who were near and dear. And among these losses there has very likely been at least one so premature and tragic as to be literally shattering. The silver lining is that such suffering makes its victims more sympathetic, and more reconciled to their own eventual end. If one does not exactly welcome that idea, at least it no longer terrifies. And indeed there is solace in the thought of joining those who have gone before. Belief in immortality, so closely associated with belief in God, takes many forms, some crudely selfish and some so impersonal as to be only faintly consoling. But every man, at 60, must notice that he is less beset by friends who sell life insurance.

In this enforced acceptance of mortality there is no morbidity. Indeed, at 60 a man worries far less about the future than he did at half that age. His

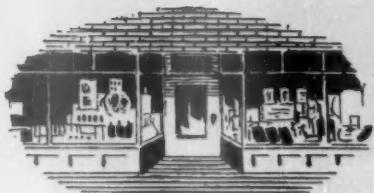
major concern now is not with making a living. It is rather with rounding off a life. If ambition has been cut down to size, interest in that which can still be accomplished is enlarged. Churchills and Adenauers are few and far between, but every man can at least improve what he has in hand. So, at 60 people come to think less of achievement and more of accomplishment. What is apparent in men, in this respect, is even more obvious in women. With them there seems to be a compensatory law decreeing that mellowness shall increase as allure diminishes. An apple orchard in April is lovely. It is no less attractive when the fruit appears.

Among the other matters on which attitudes change, around 60, is economic security. Of course many at that age have little prospect of financial independence. But it is apparent that those who worry most about this are younger people. At 60 both men and women are well aware that life is essentially insecure; that self-fortification is the only reliable defense against its slings and arrows. Governments can, and often do, increase the insecurity that is the natural lot of man. As they distribute old-age pensions they also seize one's personal savings. And no government can ever decree that the dissolute shall be frugal, the querulous, contented, or the cowardly, strong.

At 60, whatever one may have thought earlier, one will have learned that the possessions of greatest value are not for sale. The laughter of children, the feel of verdant earth, the song of the birds in early morning, the sunset and hearth at nightfall—such are the goods from which the deepest satisfactions come. As capitalism cannot create them, so communism cannot take them away. To recognize this is not to underrate the importance of the free market, nor to stand aloof from the current battle for men's minds. On the contrary, our victory in that battle depends on realization that what we call immaterial is often of the greatest importance, and vice versa.

It was the custom, before we began to confuse schooling and education, to start an apprenticeship at 16. Then, in due course and not too fast, one came to craftsmanship and thereby made a living. At 60, or thereabouts, the tools of a craft, like the armor of knighthood in its day, were turned over to representatives of the rising generation. Having made a living it was time to round out a life.

The regulations change, the span of life is lengthened, but the same three stages remain. They may be called the periods of passion, without which there can be no urge to create; of dispassion, without which no effort can be constructively directed; and of compassion, with which the work of all men should be judged. At 60 the chances are that men and women, whatever their individual shortcomings, are becoming compassionate. And if that is true this birthday is indeed significant.



▲ Old Style "2D" Storefront with Shallow Display Windows

New "3D" Visual Front that puts the whole store on display



Kasdin Drug Company, Miami Beach. Owner and Contractor: Shelton Spector, Miami Beach.

Is your store really OPEN for business?

Look at the stores on your street. Many of them have Visual Fronts. The best way to fight competition like that is to open up your store with glass, too. An L·O·F Visual Front will put the *whole inside of your store* on display for passing shoppers . . . instead of just a few display window items.

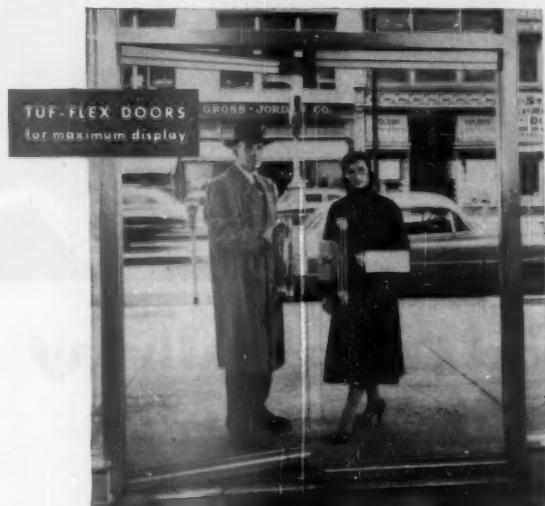
And a Visual Front costs remarkably little.

Ask your local Libbey·Owens·Ford Glass Distributor for an estimate. He has a lot of experience with storefront work. He knows local codes and conditions. He can put you in touch with local architects and contractors who specialize in storefront work.

And he has this complete line of storefront materials:

1. L·O·F Polished Plate Glass.
2. *Thermopane** insulating glass to reduce steam and frost on windows in winter.
3. *Tuf-flex** Doors for unobstructed visibility.
4. Golden Plate to reduce fading of displayed merchandise.
5. *Vitrolite** glass paneling for exterior beauty.
6. Mirrors of L·O·F Polished Plate Glass to enlarge and brighten your store.

Mail the coupon for your free booklet on Visual Fronts, and the name of your nearest L·O·F Distributor.



For a modern VISUAL FRONT see your nearest
L·O·F GLASS

LIBBEY·OWENS·FORD GLASS DISTRIBUTOR

Libbey·Owens·Ford Glass Co.
9734 Nicholas Building
Toledo 3, Ohio

Send me your booklet on Visual Fronts and the name of the nearest L·O·F Distributor

Name (Please Print Plainly)

Address

City Zone State

A rural plant site with plenty of labor available

There are many potential industrial sites in rural America, but most are far away from an adequate labor supply.

Labor supply is one of the remarkable features of this Fernald industrial development. It is actually easier to get to it from the fast-growing northwestern suburbs of Cincinnati than to get from these same suburbs to the center of the city. And Fernald is also only 12 miles from industrial Hamilton.

Another unusual advantage is that it lies in the broad, level, well-drained valley of a river that is no longer there — the glacier changed its course. But down beneath the glacial gravel there is an almost limitless supply of fine water.

Roads, gas, electricity are all there. The Chesapeake and Ohio Railway from Cincinnati to Chicago runs through the site and connects it with trunk lines to all points. The Chesapeake and Ohio Railway owns 88 acres alongside its

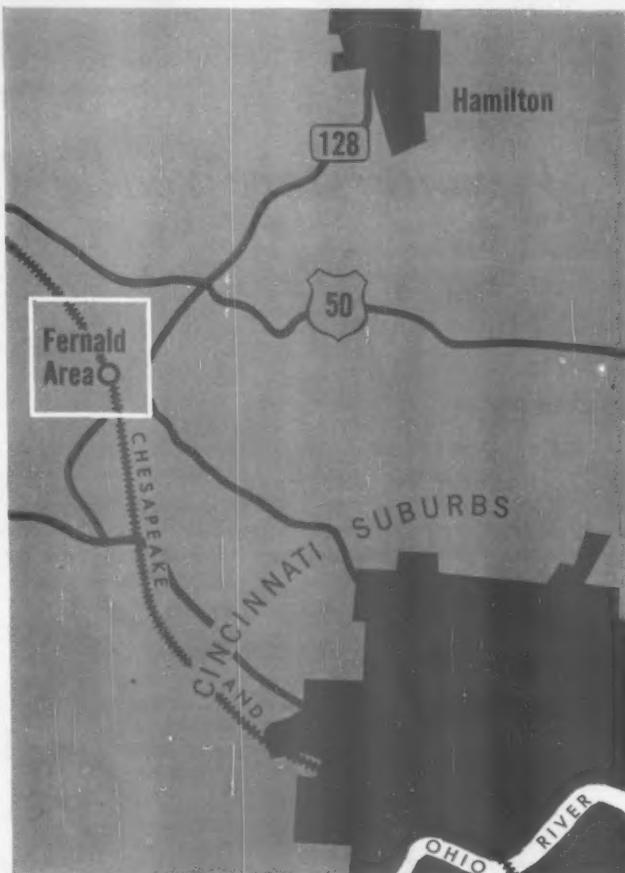
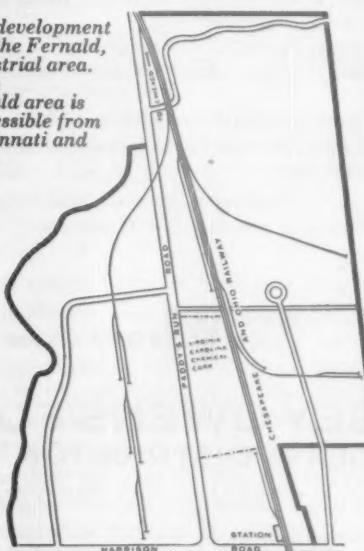
tracks with plenty of adjoining acreage available.

Seldom have we seen an industrial location that offers so many of the features most industries want. For a Pin-Point Survey giving full information write to:

Chesapeake and Ohio Railway, Industrial Development Department, Cleveland 1, Ohio, Detroit, Mich., or Huntington, W. Va.

Proposed development of part of the Fernald, Ohio industrial area.

The Fernald area is easily accessible from both Cincinnati and Hamilton.



Chesapeake and Ohio Railway



SERVING

VIRGINIA • WEST VIRGINIA • KENTUCKY • OHIO
INDIANA • MICHIGAN • SOUTHERN ONTARIO



WASHINGTON MOOD

BY EDWARD T. FOLLIARD

WOODROW WILSON used to say that one of two things happened to men who came to Washington to serve in the government: either they swelled or they grew. The feeling here, even among some who are not friendly in a political way, is that President Eisenhower has grown; or at least has evidenced a growing mastery of his job.

Something in the atmosphere of the White House these days recalls an old story about Ike in World War II. A visitor to his headquarters at Versailles was asking about the setup and about how the supreme commander operated.

"Ike runs it," said one of his generals, "and if you don't think so when you first arrive you damn soon find out."

Running an army of 3,000,000 men and heading a government of 160,000,000 free citizens are, of course, not the same thing. They do, however, call for some of the same kind of equipment, notably the gift of leadership. Where Ike has been showing improvement is in leadership in the political field. Significantly, he no longer calls himself a political "novice."

Sherman Adams, the assistant to the President, was talking about this recently.

"He has reached the point," he said of Ike, "where he is immensely more confident of himself. It could have been said with some accuracy at one time that he had some uncertainty as to what he should do as a political leader. He wasn't sure he had the 'feel' of things."

"He had a good idea of world leadership, if any one man can exercise world leadership. But he wasn't too confident that he knew the points of the political compass. Those points now have been illuminated and read. I think he now has the swing of things, and I think this will lead to a more positive course in the months ahead."

People seem to sense this development not only in Washington but from afar. I was in Texas recently and used the occasion to put my ear to the ground in that fabulous empire. In Dallas I talked

to Clint W. Murchison, who owns or controls oil, ranch and other properties with an estimated worth of more than \$300,000,000. Clint supported Ike in '52, but still thinks he should have run as a Democrat. He is convinced that if this had happened, Ike would have a Congress with a membership of at least 60 per cent Democrats instead of the hairline Republican control that now worries him.

Clint's estimate of the picture in Washington was terse and positive.

"I think Ike has appraised the situation," he said, "and has taken charge."

Reading the newspaper headlines in Dallas, Fort Worth and Houston, I had a feeling at times that I was back in the New Deal or Fair Deal days. "Ike Asks Social Security Spread," "Ike Urges Health Program," "Ike Calls for Housing"—so read the headlines.

Some of the well heeled Texans I talked to seemed to be amused by this, figuring that it was smart politics, but I know there were others who were greatly displeased and were asking each other what had happened to the G.O.P. slogan, "Time for a Change."

• • •

Campaign talk often is full of contradictions, and I am sure is meant to be. However, this much should be remembered about Ike's '52 campaign: He wasn't so much interested in appealing to Republicans as he was in wooing Democrats and independents. He and his advisers knew that the Republicans already were in line; the big job, if the Eisenhower-Nixon ticket was to win, was to corral the votes of Democrats and independents, most of whom, surely, had no desire to see a scrapping of New Deal and Fair Deal reforms.

Ike, bearing this in mind, went out of his way in the campaign to say that he would "not turn the clock back." He was specific in his promise to improve and extend the Social Security program.

Some of the more liberal Democrats in Congress are not impressed by Ike's housing and health programs, arguing that they are of the "cut-rate" variety. Some of the more conservative Republicans, on the other hand, dislike almost anything that smacks of the 20 year reign of Roosevelt and Truman.

Most of the Washington political reporters, however, seem to feel that Ike has made it easier for

OF NATION'S BUSINESS

Trends

Republicans to face the voters next autumn.

Turning to a lighter side of the Presidency, Ike by now has learned something

that every occupant of the White House finds out sooner or later. It is that every word a Chief Executive utters, no matter how seemingly unimportant it appears to him, may have significance for others—and may also be material for controversy. So it has turned out in connection with two of Ike's friendly remarks, one about Wild Bill Hickok and the other about Gen. Robert E. Lee.

Anybody who grows up in Abilene, Kans., as Ike did, knows about Wild Bill Hickok. The town, which years ago was at the end of a cattle trail, was a wild one, abounding in saloons and hard-drinking cowboys. Wild Bill, of course, was a handy fellow with a six-shooter. The town fathers hired him as marshal to bring peace and order to Abilene.

Well, one night in the Mayflower here, President Eisenhower made a speech before the Anti Defamation League of B'nai B'rith. He denounced character assassination, and said every individual had the right to meet his accuser face to face. Looking for an analogy, his thoughts turned to his boyhood hero, Wild Bill.

Wild Bill's code, the President said, was: "Meet anyone face to face with whom you disagree." He was implying that the old Abilene marshal would never shoot a man in the back.

"If you don't know anything about him," Ike told his audience, "read your Westerns more."

• • •

An editorial writer on *The Washington Post*, taking this casual advice literally, got hold of a book called "Land of the Dacotahs," by Bruce Nelson, and found that the author gave Wild Bill a much lower rating than did the President. He read that Hickok was "a notorious gambler and gunman." In an editorial, he went on to quote the book:

"Most of his (Wild Bill's) alleged 27 killings had been accomplished in the service of the law as a frontier marshal; but the evidence indicates that he was no more averse than the next desperado to shooting a man in the back to satisfy his own personal pique or whim.

"It is only in Hollywood movies that famous gunmen give their enemies fair warning by confronting them in the town streets. Actually, the reputations of virtually all the famous killers of the West were made by quite other means. A common practice was to hide in a dark alley, after first screwing up one's courage with whisky, and then shoot the victim in the back."

This unromantic account of the old West brought a stream of letters into *The Post*. Some of the writers were indignant and sought to champion Wild Bill. Dr. R. J. Jackson wrote from Rapid City, S. D., to defend the old fellow:

"I have practiced here in the Black Hills for 50 years and so have heard most of the stories, both of fact and fiction—some of this about Bill and Calamity Jane I have heard from men who knew both of them. I knew Calamity myself. As near as I can tell, Bill had gone down hill by the time he came to Deadwood, but in his day as a marshal he was known as a fair and completely fearless fighter."

There was more for than against Wild Bill. In the end, most agreed that Ike, while he might have been off a little in his facts, had certainly been on the target when he went after character assassins.

• • •

Another time the President made a speech here before the United Daughters of the Confederacy, and took occasion to praise Gen. Robert E. Lee. He said that Lee had fought for that which he thought was right, and he told the Daughters that he had a picture of the great Confederate military leader and kept it in his White House office.

This was too much for John Hope Franklin of Washington. He, too, wrote a letter to *The Post*. After saying that he had no intention of fighting the Civil War over again, and observing that General Lee and his supporters fortunately were defeated more than 80 years ago, Mr. Franklin went on:

"I am more than a little disturbed, however, that the President of the United States in greeting the United Daughters of the Confederacy recently would hold up Lee and the ideals in which he believed as worthy of emulation.

"It does not seem that Lee's great sin of taking up arms against the United States should be condoned merely because, as the President said, he fought for the principles in which he believed."

Mr. Franklin went on to note that our present-day enemies also are sincere in their beliefs, and think they are justified in the actions they take against the United States. He said that in these trying days there was something tragically ironical about the reverent attitude toward General Lee.

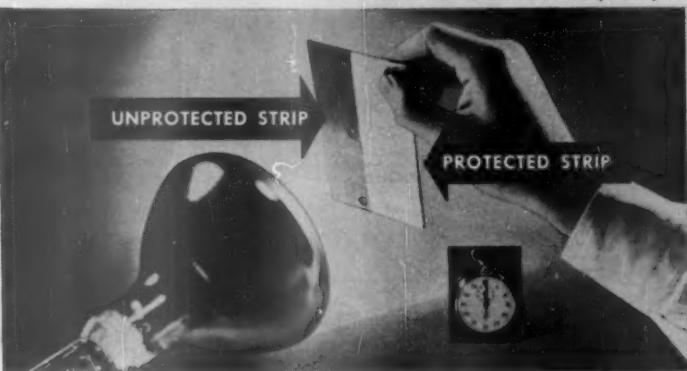
"It is well to remember," he concluded, "that no one has ever worked with greater zeal and no one has ever come closer to overthrowing the Government of the United States by force and violence than Robert E. Lee, whose picture now hangs in the White House."

Whether or not President Eisenhower read this letter is conjectural. Anyway, he still has General Lee's picture hanging on the wall of his office, next to one of Abraham Lincoln.

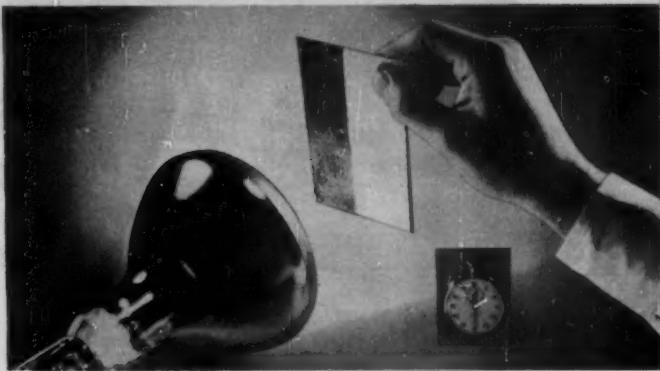
These instances of how casual remarks of a President can stir up controversy are not terribly significant. They merely suggest how careful the man in the White House must be. The greatest area of danger for him—it certainly was for Mr. Truman—is the news conference, where he indulges in a give-and-take with reporters. Here, up to now, Ike has been either smart or lucky—maybe both.

HEAT TEST SHOWS HOW ALUMINUM PIGMENT PROTECTS ROOF COATINGS . . . KEEPS BUILDINGS COOLER

Demonstration as developed by American Asbestos Products Company, Cleveland, Ohio.



1 AFTER ONE SECOND when simulated sunlight from lamp shines on a panel of highest quality 90 pound felt roofing paper. Right side of panel has been protected with aluminum asbestos roof coating. Left side of panel remains unprotected from heat of lamp.



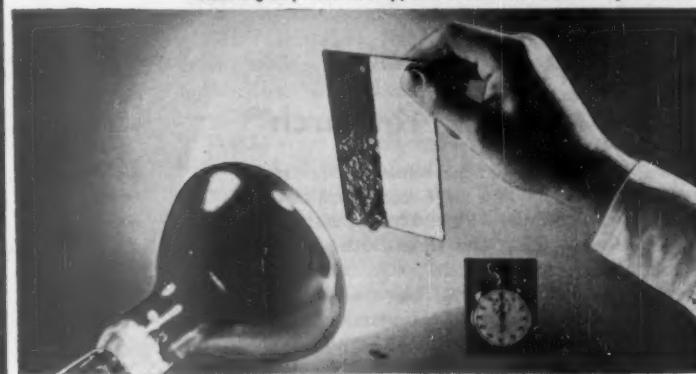
2 AFTER 30 SECONDS unprotected asphalt strip begins to soften. Aluminum protected strip remains unchanged. Summer sun often raises roof temperatures above the melting point of asphalt, draws out the life-giving oils in the roofing and shortens roof life.



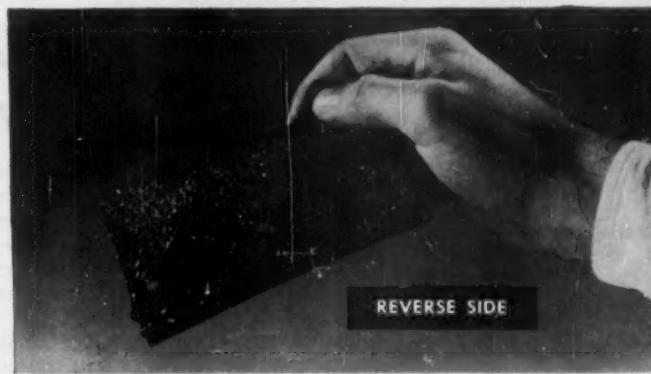
3 AFTER 45 SECONDS heat raises blisters on unprotected strip. On roofs, blisters crack open, roofing materials dry out and deteriorate. Reflective quality of flake-like aluminum pigment prevents this blistering on protected strip, acts as effective insulator against heat.



4 AFTER 90 SECONDS unprotected asphalt strip begins to run and sag. Aluminum coated strip remains unaffected. This means longer life to roofs. The heavy metal film of practically indestructible aluminum shields and protects the asphalt asbestos base.



5 AFTER 120 SECONDS asphalt has become fluid, drips to table below. This condition on roofs means leaks, leads to costly repairs. Aluminum pigment prevents this, enables coating to be used over any previous roof paint or coating without bleeding through.



6 REVERSE SIDE OF PANEL at end of demonstration shows blisters on back of unprotected strip, none on protected section. Melting did not occur on aluminum protected strip. Aluminum asbestos roof coatings automatically assure cooler under-roof temperatures.

Asphalt asbestos aluminum coatings can be applied with an ordinary roofing brush or spray gun . . . come ready mixed . . . require no thinning or heating. They protect roofs against leakage, insulate them, and by reflecting the sun's rays, reduce roof surface temperatures as much as 40 degrees. Result: greater comfort and work efficiency in factories, offices or schools . . . lower power and water bills for refrigeration plants, food lockers, milk coolers . . . lower evaporation losses from oil or gasoline tanks. **ALCOA does not make roof coatings.** But we will gladly refer you to reputable manufacturers who do. Write today. Use the handy coupon.

ALCOA
ALUMINUM



ALUMINUM COMPANY OF AMERICA

Paint Service Bureau, Aluminum Company of America
1797-C Alcoa Building, Pittsburgh 19, Pa.

Please send me information on asphalt asbestos aluminum coatings. I am interested in protecting

Name _____

Company _____

Address _____

City _____ Zone _____ State _____



Use of movable partitions in the clear-span Butler interiors provides flexibility to match changing needs. Insulation and aluminum roof sheets help assure year-around office comfort.



Banks of windows in the sidewalls flood the Butler buildings with natural light. Butler sheeting bolted firmly to the framework, keeps upkeep costs low . . . furnishes good fire protection.

"BUTLER buildings help speed vital expansion of *Remington Rand* research"

"Speed was important when we signed the contract for the first of our two 50' x 200' aluminum-sheeted Butler steel buildings in 1948," says S. E. Szemetko, plant engineer at Remington Rand's Laboratory of Advanced Research, Norwalk, Conn. "And having it ready for use in 10 weeks proved the value of Butler's fast delivery and quick erection!"

"We also experienced the ease and economy of using Butler steel buildings with other materials when our 4-story office building was built in 1952. By combining them with masonry construction, we obtained the needed space—even though our site area was limited. The 40' x 300' Butler building on the fourth floor, and two 20' x 300' Butler sections at each side on the third floor, give us 24,000 sq. ft.

of well-lighted, easy-to-heat, insulated office space.

"We don't know of a more economical or satisfactory way in which we could have obtained the buildings we needed. Our three Butler buildings are attractive. They provide the functional space we need for peak efficiency. Their steel-aluminum construction furnishes good fire protection . . . keeps maintenance costs low. We think that's proof that our decision to build with Butler was sound!"

See your Butler dealer! He'll help you with your building plans . . . show you Butler rigid-frame and bowstring-truss buildings—in widths, lengths, single and multiple installations—to fit your site and use. Write office nearest you for name of your dealer and more details by mail.



BUTLER MANUFACTURING COMPANY

7456 East 13th St., Kansas City 26, Missouri
956 Sixth Ave., S. E., Minneapolis 14, Minnesota
1056 Avenue W, Ensley, Birmingham 8, Alabama
Dept. 56, Richmond, California

Manufacturers of Oil Equipment • Steel Buildings • Farm Equipment • Cleaners Equipment • Special Products
Factories located at Kansas City, Mo. • Galesburg, Ill. • Richmond, Calif. • Birmingham, Ala. • Minneapolis, Minn.

NATION'S BUSINESS • MARCH 1954

INDIANA'S REVOLT:

What's happened since

By CRAIG THOMPSON

WHEN the people of Elkhart County, Ind. (pop. 84,512) elected D. Russell Bontrager as their prosecuting attorney in 1945 neither he, nor they, had any notion that they were embarking on a billion dollar revolt against the welfare state.

The 14 years preceding Mr. Bontrager's election had been marked by a gradual, progressive concentration of power in federal hands. Willingly or reluctantly, state and county governments had surrendered varying degrees of control over their affairs to a growing bureaucracy in Washington, and in no administrative category had this trend been more complete than in the field of human welfare. Things had got so that welfare people, like the Boston Cabots of rhyme and story, held themselves accountable only to God.

The magnitude of the give-away program these people administered was something to make a piker of even the most spectacular huckster. Quite aside from the sums paid out under the Old Age and Survivors Insurance, commonly called Social Security, federal and local handouts to old people and dependent children totaled more than \$1,000,000,000 a year in 1946. Despite increasing prosperity plus a wider extension of Social Security that figure was doubled in 1953.

More disturbing than the money, however, was the fact that, behind a front of secrecy, two attitudes were at work which, taken together, constituted a double-barreled threat to the American way of doing things. These had been summed up in a booklet distributed to

state and county welfare workers by the Federal Security Agency. In handing out this vast sum, the FSA solemnly urged its local agents to "think and feel in terms of the applicant's needs, and be less protective of the taxpayer."

The costly results of this approach, or so the FSA booklet said, were "a basic essential for attainment of the socialized state." In short, not only was the taxpayer's interest to be ignored, but his money was to be used to destroy him.

When Russell Bontrager assumed his district attorneyship in 1946 he was not even dimly aware of the existence of this brand of un-American heresy. Conditions in Elkhart were neither especially good nor bad, and welfare administration was not a local issue. Nor was Mr. Bontrager greatly different from the district attorneys in the several thousand other counties making up the 48 states. He was young, good-looking in a tall, spare, dark way, gifted with a grasp of local politics and politically orthodox in a predominantly Republican area. At the time, his most likely future seemed a slow, steady rise up the public ladder to a paunchy, comfortable old age in a local judgeship and retirement as a man known and respected within the limits of his jurisdiction, but unheard of elsewhere.

As county prosecutor, however, one of his duties was to attend sessions of the local circuit court during the days set aside for disposal of uncontested divorces. There was seldom anything for him to do except to

SOCIAL SECURITY:

watch and listen while an unhappy parade of broken marriages filed by. Mostly the divorce seekers were women, and most of them had small children. Over and over they told the same drab tale—their husbands had abandoned them. Over and over the judge went through the same desultory motions, granting the petitions and ordering the fathers to pay specified sums each week or month for the maintenance of their children. Everything considered, it was the unlikeliest place for opportunity's lightning to strike a young DA.

But one day Mr. Bontrager asked himself a pregnant question.

"I wonder," he mused, "how many of these fathers actually pay anything?"

Inevitably another question formed itself: "If they don't, who does?"

Sure enough, Mr. Bontrager found that, indeed, a

him the duty to prosecute parents who failed to support their children, and also to prosecute people who fraudulently obtained public aid. He pointed out these facts, only to be told, in effect, that Indiana law was beside the point. The point was that, under federal statutes and under regulations laid down by the Federal Security Agency, he could not have what he asked for.

As Mr. Bontrager saw it, this amounted to a use of federal power to short-circuit local laws and responsibilities. In this situation what has come to be called "the Indiana revolt" was born.

The story of the Indiana revolt has been told many times, but it needs a brief repetition here. Mr. Bontrager understood that the issue he confronted was bigger than his county or his state; it was a national issue. He also understood that, as a little known prosecutor in a middle-sized county, he was poorly placed to carry on the fight that, he now felt, had to be fought. To better his strategic position he sought, and won, a seat in the Indiana State Senate.

In the 1951 session of the Indiana General Assembly, Mr. Bontrager and Wesley Malone, another senator, dropped into the legislative hopper a relatively innocent bill requiring county welfare agencies to provide other county officials with a quarterly list of all people receiving public assistance, together with the sums being paid them. In the beginning, support for this measure was so enthusiastic that one legislator amended it to make the lists available to the general public. Then the storm broke.

Some protests came from people who feared the bill would open the sluices to a flood of malicious gossip among mean-spirited neighbors of deserving assistance recipients. More strident objections came from the academic fringe. One "professor of public welfare" called it a "phantasmagoria" (which means an exhibition of optical illusions) compounded of a small amount of fact and much delusion, irresponsible journalism and political cynicism." But by far the most potent objection came from Washington itself. Oscar Ewing, then head of the Federal Security Agency and himself an Indiana boy, served brisk notice that, if Indiana passed the bill, he would cut his home state off from federal funds.

Faced with Mr. Ewing's mandate, many previously enthusiastic supporters, including the one who offered the amendment, lined up solidly against the bill. It passed, nonetheless, and when Governor Henry F. Schricker vetoed it, it passed again. True to his threat, Mr. Ewing cut Indiana off from federal assistance money.

At the time (March, 1951), Indiana's assistance agencies were passing out money at the rate of slightly more than \$29,000,000 a year, and getting \$21,000,000 of that from Washington. The loss of \$21,000,000 was a serious fiscal problem. The Indiana General Assembly might have solved it by truckling under to Mr. Ewing, but this it patly refused to do. In the end, Congress went over Mr. Ewing's head, and restored the money. But the whole episode still remains a sample of the bureaucratic arrogance that can be bred by centralized government and administrative secrecy.

While this was going on, the Indiana General Assem-

PUBLIC ASSISTANCE ROLLS

Twenty-nine states have legislation to permit at least limited inspection of public assistance disbursements records. These are:

Alabama	North Carolina
Arkansas	North Dakota
Florida	Ohio
Georgia	Oklahoma
Illinois	Oregon
Indiana	Pennsylvania
Iowa	South Carolina
Kansas	South Dakota
Louisiana	Tennessee
Michigan	Utah
Mississippi	Vermont
Missouri	Virginia
Montana	Washington
Nebraska	Wisconsin
New York	

large number of fathers were in default. With impeccable logic, he assumed that there must be a direct relationship between the number of delinquent fathers and the number of families drawing public money to feed, clothe and house their children. So he next went to the county welfare agency where he asked for a list of people receiving help under the Aid to Dependent Children program. Here he got a shock. He was told, politely but firmly, that he could not have it.

A law on the Indiana books specifically entitled a county prosecutor to the information Mr. Bontrager sought. Besides, there were other laws which laid on



ARCHIE LIEBERMAN—BLACK STAR

D. RUSSELL BONTRAGER fought back when the Federal Security Agency thwarted his efforts officially to inspect relief rolls in Indiana

bly started an investigation of welfare administration to find out what it was that Mr. Ewing was so determined to keep from public view. They uncovered what Mr. Bontrager has called, with a fine oratorical flourish, a "veritable cesspool of inequity."

"We were flooded," he says, "with information concerning assistance awards to unworthy applicants. We found expensive television sets in the homes of assistance recipients. We found people who had conveyed away valuable property so as to make themselves eligible for public funds. We found quacks exploiting the medical assistance phase of the program by making a prey of human suffering at the expense of the public. Worst of all, figuratively speaking, was the issuance of licenses for prostitution to mothers of illegitimate children under the idealistic program of Aid to Dependent Children."

A sample of what he meant by "licenses for prostitution" was a woman who was drawing public aid for five children and whose husband had been in prison too long to have fathered any but the oldest. A sample of another sort was the aged and genuinely destitute couple whose only son, a man with a six figure income, refused to contribute to their support.

All in all, it was a sorry picture involving not only fraud by applicants, and disregard of taxpayers by case workers, but an abandonment of family integrity by people who could easily afford to care for their own. Enough cases fell into this last category to suggest that the dry rot of socialism had already begun to reach an advanced stage.

But with the adoption of the "open list" law, something began to happen to Indiana's welfare administration that the law's opponents still refuse to concede could happen. In the first place, the dire prophecies of malice and political cynicism were not borne out. According to the Indiana State Department of Welfare not a single instance of a malicious person using

the open list to embarrass an assistance recipient has come to its attention. It has further been found that the open list discourages political meddling in welfare administration precisely because it increases the chances of being caught. And in other respects a few statistics on caseloads and dollar expenditures tell an eloquent tale.

Briefly, this is what has happened:

From March, 1951, to the end of October, 1953, the number of aged people drawing aid has dropped from 50,255 to 39,022. In the same period, the number of children under the dependency aid program has shrunk from 26,193 to 18,770. Despite increased benefits to individuals, the costs of maintaining the program have been reduced by more than \$5,500,000 a year. All this without, as far as is known, neglecting a single deserving individual.

If the same showing could be made in the nation, the annual saving would be a staggering \$300,000,000 or more.

There are those in Indiana and elsewhere who maintain that the open list was not responsible for Indiana's accomplishment. They point out that the caseload had begun to diminish well back in 1950, or nearly a year before the open list became law. They attribute the reduction to a wider distribution of Social Security benefits, and to a continued high level of employment and prosperity.

Doubtless these factors did play a part. But, if these were the dominating factors, then all the states should have been equally affected. The fact remains that no other state has matched Indiana's performance, and that the open list was the one factor operating in Indiana that was not present in most of the others.

Figures comparing Indiana with the United States as a whole tell the comparative story.

Taking the category of Old Age Assistance first, this is what we find:

In June, 1951, Indiana had 48,727 old people receiving assistance. The average monthly benefit to each was \$35.37. At this rate, the annual cost of OAA for Indiana was \$20,684,208. In the same month, in the whole United States, 2,745,285 old people were receiving assistance. The average payment was \$43.23. At this rate, the annual cost was \$1,434,144,034. Jump now to June, 1953. Indiana has 39,752 recipients for OAA, and is paying each an average \$37.63 a month. At this rate the annual cost comes to \$17,950,488. In the same month, across the nation, 2,597,075 old people were drawing an average of \$48.74 each for a total annual cost of \$1,518,977,266.

Thus Indiana had cut her caseload by 18.5 per cent compared to a national shrinkage of 5.3 per cent. She had increased monthly benefits by \$2.26 per recipient compared to the national average of \$5.51. And she had lowered her total OAA outlay by 13.2 per cent while, across the nation, the increased individual benefits had so far offset the reduced caseload as to bring about a 5.9 per cent gain in total costs.

Figures covering Aid to Dependent Children tell the same kind of story. In June, 1951, Indiana had 24,448 children receiving an average of \$27.02 per child for a total annual expenditure of \$7,929,611. In June, 1953, the caseload had been cut by 20.9 per cent to

SOCIAL SECURITY:

19,321, and despite an increase in individual benefits to \$30.65 a month per child, the annual cost at this rate was reduced 10.6 per cent to \$7,085,688.

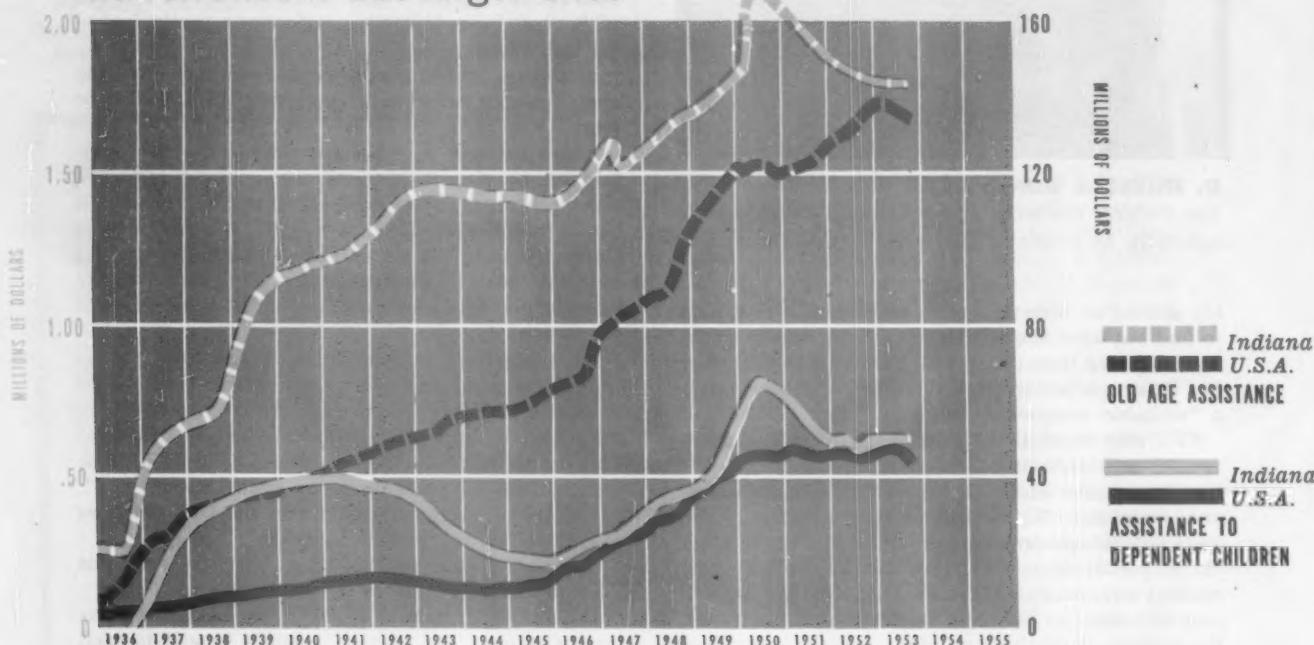
In the nation, in June, 1951, the ADC caseload was 1,617,826, the average monthly payment to each was \$28.67, and the annual cost figured at this rate \$556,506,140.

In June, 1953, the caseload had gone down 7.7 per cent to 1,492,640 while average monthly payment was

where welfare money is concerned, is a kind of inbred conservatism.

Based upon national assistance figures, estimates are that, out of every 1,000 of U. S. population aged 65 years or more, 224 are on assistance rolls. In contrast to this average, some states have loaded their assistance rolls with old folks far beyond anything that appears to be either reasonable or necessary. In Louisiana, for example, more than 700 out of every 1,000 aged people

Fewer checks but larger ones



INDIANA'S EXPENDITURES for public assistance have declined sharply since 1951, but the level of national assistance payments has remained high

up to \$30.98 for an annual cost of \$555,006,672. Compared to Indiana's ten per cent cost reduction, the nation's was a microscopic .002 per cent.

These figures show that Indiana differed from the nation in still another respect. While Indiana increased children's benefits by \$3.63 a month, or \$1.32 more than the average national upgrading, the other states were raising old age benefits by \$5.51, or twice the Indiana rate.

It is also significant that, while Indiana's caseload and cost figures have continued to decline since June, 1953, those of the nation have leveled off and are now beginning to show a slight, steady rise.

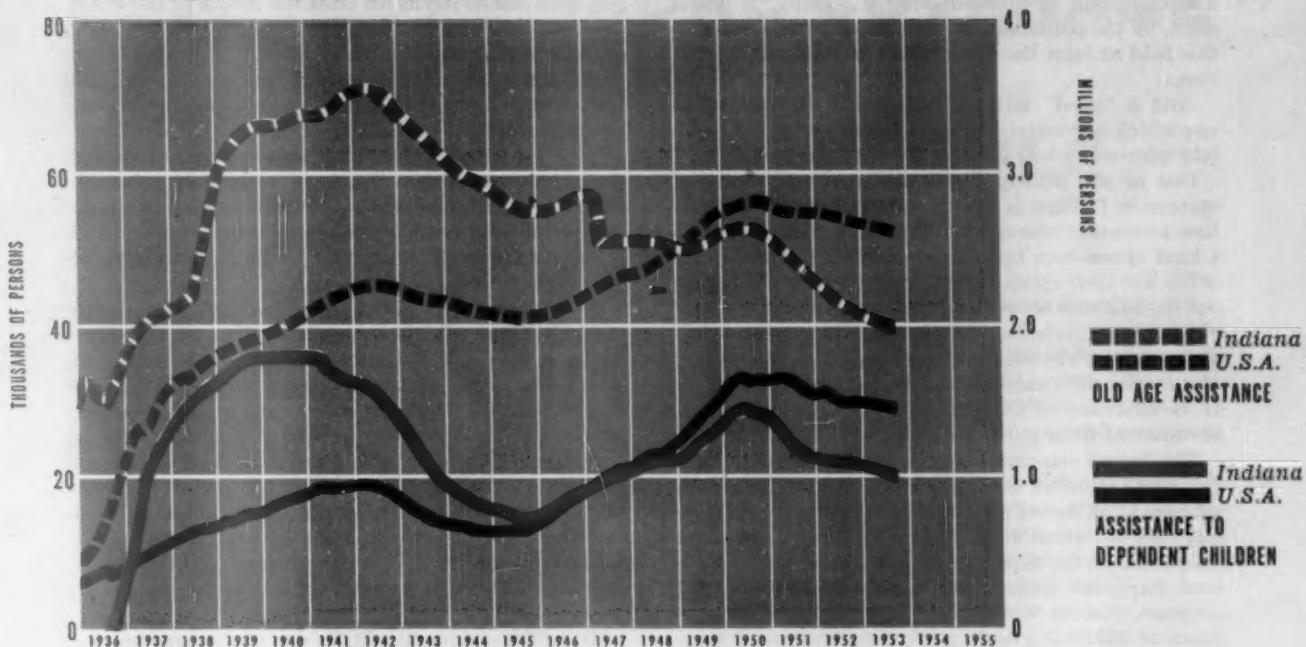
Indiana's performance under the open list is even more arresting when viewed in the light of her relative position among the other states. Ranking twelfth in population, eighth in manufactures, tenth in value of agricultural products and only thirty-seventh in area, Indiana is among the first states to feel the effects of either economic booms or busts. The result, at least

are drawing public money, and at an average rate of \$50 per month each. There are other states where the figures are almost as high. Oklahoma carries 595 per 1,000; Arkansas 539; Georgia, 483; Alabama, 456; Mississippi, 445 and Texas has 428. Even before the open list, Indiana had only 129 per 1,000 of its old people on assistance, and that figure has since been considerably reduced.

In the field of Aid to Dependent Children, Indiana falls into the same relative position. Florida, for example, is aiding 82 out of every 1,000 children in the state. In Louisiana the figure is 75; in Oklahoma, 69; West Virginia, 69; Arkansas, 67 and Kentucky, 57. In Indiana, as of 1950, the figure was 22 and that also has since been reduced. Such figures emphasize the character of Indiana's reductions because they show that, comparatively, there was not much fat to work on.

Indiana conservatism has also been displayed in the amounts it grants to the individuals receiving assistance. While its payments to individual children are

How relief rolls shrank



INDIANA'S CASELOAD for both dependent children and the aged dropped since it enacted its open list law in 1951. The national caseload shows little change

now only a few cents below the national average—\$30.65 a month for Indiana compared to \$30.98 for the nation—this has not always been so, and the traditional Indiana position is perhaps better illustrated by the fact that Indiana is now paying its aged \$37.63 a month compared to a national average of \$48.74. But even the average pales by comparison to some states. For example, the rate is \$78.70 in Colorado; \$69.39 in California; \$66.70 in Massachusetts; \$66.40 in Connecticut and \$65.88 in Oklahoma. The lowest grant anywhere, incidentally, is in Puerto Rico—a princely \$7.61.

Thus, what Indianaans call conservatism in these matters might, among Townsendites in California or Share-the-Wealthers in Louisiana, bear another name. They, doubtless, would term it niggardliness. But in fact, behind the Indiana conservatism is an experience that few states have had. It concerns a legal gimmick called the "lien law."

In Indiana when an old person, or couple, who own their home or other property reach the point where they must ask for public assistance, they can get it only if they give the state a lien on their property. Thereafter, the money they draw becomes a cumulative charge against the real estate. Having a financial interest in the property, the state keeps it in repair so that the value will not go down because of neglect. Eventually, when the property is sold, either by the old people who own it or by their heirs, the state gets back what it has advanced for assistance and repairs.

Lien laws now exist in a number of states, but Indiana is among the few that have had an off-again on-again experience with it. The history of that experi-

ence is instructive. Indiana's first lien law was enacted in 1936, but in 1941 the legislature repealed it. The month after repeal brought 2,347 more applicants for old age assistance than in the preceding 30 days. In the first year after repeal, the number of applicants was 7,420 more than in the preceding 12 months.

From 1941 to 1947 Indiana had no lien law. Then, in February, 1947, the law was put back on the books. The immediate result was a sharp drop in the number of assistance applicants. During the first year after the law was restored there were 7,683 fewer old people asking for help than in the preceding year.

The lesson of this experience is that, where public money is concerned, cynicism is not always political. It proves that among our people there is a substantial portion to whom love, honor, and family responsibility have no meaning when it comes to supporting aged parents and relatives. These people are perfectly willing to let their parents become public charges when they know that, in doing so, they will not endanger the title, or value, of a piece of real estate the old folks own. But when "letting the government take care of them" means that, eventually, they will have to pay the government back, they prefer to shoulder their own family obligations. Their behavior, in short, bespeaks more greed than need.

For the past 20 years in the United States, professional pensioners have argued that any attempt to cut back the dollar costs of welfare programs is a "traffic in human misery." In many states professional politicians agree, at least to the extent of believing that any tampering with the assistance programs is "bad poli-

SOCIAL SECURITY:

tics." In Indiana, however, experience has developed a strong body of opinion—shared equally, it would seem, by the politicians of both major parties—that in this field at least the best politics is good administration.

And a "good" administration may be defined as one which adequately answers the needs of the destitute without unduly gouging the taxpayer.

One of the principal spokesmen for this body of opinion in Indiana is now Russell Bontrager, the one-time prosecutor who sparked the revolt. He has become a kind of one-man task force, spending practically all of his free time appearing before civic groups throughout the Midwest to recount the Indiana story. Because of his own experience, Mr. Bontrager has become one of the country's busiest, and most dedicated, supporters of a movement (which is also being supported by the U. S. Chamber of Commerce) to divorce the federal government from public assistance.

The figures comparing a state like Indiana with one, say, like Louisiana serve to sum up a powerful reason why the U. S. should get out of the relief business. The fact that Louisiana keeps 700 out of every 1,000 of its old people on the assistance rolls is, manifestly, a political hangover from Huey Long's share-the-wealth program, just as California's average monthly payments of \$69.39 is a heritage from the Townsend planners.

With federal aid, Louisiana's payments of \$50 a month to its incredibly large roll of recipients actually

cost the state only \$17.50 each. And in California each of those \$69.39 payments costs the people of the whole country \$35.

The availability of federal money, in short, encourages abuses to suit the whims and fancies of local politicians, or to satisfy the pressures put upon them by the people of the locality.

But the federal money that supports these abuses is collected everywhere. Thus, no matter how economically a state like Indiana may run its welfare program, the people of that state through their income taxes and other federal levies must still contribute to the support of programs in other states.

Mr. Bontrager believes that Indiana's experience under the open list is a sample of what all the other states can do if they want to, and he points to the fact that some 20 others have enacted a similar law. He is convinced that "with the federal government concentrating on the operation of Old Age and Survivors Insurance (Social Security) the individual states can and should assume the responsibility in full of meeting all residual assistance needs. Complete federal withdrawal would result in better and more careful administration by the states, and also could result in less total cost to the people than is now the case under federal aid."

It would, one might add, be one of the most powerful counter blows at the concepts of centralized power and the welfare state delivered in our time. But it is one that can only be delivered by the U. S. Congress.

Before the Indiana State Senate Mr. Bontrager called for laws opening welfare lists to inspection



INDIANAPOLIS STAR—PHOTO BY FISKE

SOCIAL SECURITY

PROPOSALS: **MORE COVERAGE FOR MORE PEOPLE**

CHAIRMAN Dan Reed, Republican of New York, has called for hearings to start this month before the House Ways and Means Committee on the Administration's Social Security bill and related measures.

The program, as it stands today, covers more than 48,000,000 workers, representing about 80 per cent of jobs in paid employment. In the course of the past year, about 60,000,000 persons—almost the entire labor force—worked at some time under OASI benefits. Members of the armed forces are given wage credits under a temporary provision of the law.

Of the total insured today, some 6,000,000 are actually receiving benefits, mostly in the old-age category. In December, 1953, the average monthly payment to retired workers with no dependents was \$49; to a retired worker and his wife, about \$85.

The range of benefits under the present statute extends from \$25 to \$85 for a single worker and from \$37.50 to \$127.50 for a couple. Minimum and maximum amounts are based upon earnings and time of retirement.

The present Social Security Reserve Fund is estimated at about \$19,000,000,000, with current annual income running at about \$4,500,000,000. Payments made to retired workers amount to about \$3,000,000,000 annually, with the result that the fund is growing at an annual rate of about \$1,500,000,000.

President Eisenhower has proposed to draw into the Social Security system all farm workers and domestics, farm operators, clergymen, state and local employees, physicians, dentists, lawyers, architects, accountants and a large body of part-time and self-employed workers who are now exempt.

Proposed legislation also calls for a monthly pension ranging from a minimum of \$30 to \$108.50 for a single worker, and from \$45 to \$162.80 for a retired worker and his wife, if both are more than 65 years of age.

Other provisions of the Administration's program would give a family \$325 lump sum death benefit, \$81.40 a month for a wife if she has reached 65, \$162.80 for a wife at any age if she is left with one child up to age 18, or \$190 a month for a wife if she is left with more than one child.

All newcomers to the labor force who would be covered by the expanded system are eligible to join on Jan. 1, 1955. Some then would be eligible to retire on increased benefits two years later.

Provisions for increased Social Security taxation, shared equally by employer and employee, would bring funds in the system to a peak of \$65,000,000,000 by 1990 under present law.

That figure probably would be reached by 1980 if administration proposals are enacted by 1955.

How is this expanded program to be financed? The President has asked that the increase in Social Security tax to two per cent, effective this year, be maintained and be broadened to apply to the first \$4,200 of income rather than to the first \$3,600, as at present. Under the proposed program, the tax is expected to go to the 3½ per cent maximum for both employers and employees by 1970.

The Administration's program also would continue federal grants for old-age assistance and general expansion of both OASI benefits and a revamped formula for federal public assistance grants to the states.

Not all business groups or political and labor factions favor the program in its entirety and it is certain that Congress faces stiff battles before legislation is adopted.

The President intends that some groups be admitted on a voluntary basis and it may be that compromises of one sort or another must be worked out to provide eventual maximum coverage. For example, the amount earned by part-time workers in any one quarter of the year might be used to estimate their contribution.

The U. S. Chamber of Commerce and other business groups are expected to reassert the principle before the Ways and Means Committee that the OASI system should pay benefits now to all the retired aged and thereby eliminate the need for continued federal grants to the states. They would prefer to discontinue federal grants for old-age assistance, broadening of the Social Security tax base, and some other features of OASI benefits. The proposed new formula for federal public assistance should also be dropped, they feel.

They are expected to press the federal government's withdrawal from public assistance programs wherever it is consistent with the national interest and in keeping with sound business principles of economy and efficiency.

As time for the hearings nears, it is evident that, by and large, the Administration can expect to get the major portion of its Social Security revision enacted—and almost beyond question those sections providing increased coverage, relaxation of the retirement test and some increase in minimum monetary benefits.

As with most legislation during an election year, timing is important to the Congress. This is particularly true with measures so closely affecting the lives and well-being of such a large and growing segment of our population—an estimated 13,000,000 retired men and women 65 years old or older.

However Congress finally determines its legislative program on Social Security, it remains virtually certain that from 7,000,000 to 10,000,000 more workers will be covered than at present.

Here's how SOCIAL SECURITY GREW

THE SOCIAL SECURITY system in this country dates back only 19 years—to 1935—but the forces and circumstances which led to its creation may be traced back as far as the Middle Ages.

The Poor Laws of seventeenth and eighteenth century England set up workhouses where persons out of work were employed at such occupations as spinning flax and hemp. Dickens, Fielding and other social critics have explored the evils of this system.

In later systems for aiding the unemployed, municipalities supplemented money paid by guilds and craft unions to their idle members.

But enactment of the National Insurance Bill gave England the first nationwide compulsory system of unemployment insurance in 1911. The British plan applied, at first, to only seven groups of trades. Benefits were held to a maximum of 15 weeks in a year, with no more than one week of benefit for every five weekly contributions to an unemployment fund. There were subsequent modifications in the British system and, in 1927, Germany stepped onto the unemployment insurance scene with a sweeping proviso for assistance to manual workers whose annual incomes did not exceed 8,400 reichsmarks.

In the German scheme, employers and employees contributed three per cent of wages on an equal basis. The benefits were payable after a waiting period of six days if the worker had met the occupational requirements, was able and willing to work, and had not exhausted his right to benefits. Eligibility rested on actual employment in a covered occupation for 26 weeks in a year. Unemployment resulting from a strike or lockout was not covered.

Before the '30's, unemployment insurance was virtually unknown in this country. Welfare of this type was regarded as a local rather than federal responsibility.

The earliest steps toward an unemployment insurance program in the United States were taken by unions and employers; the former experimented with unemployment benefits drawn from union funds, the

latter with direct aid or make-work programs. The depression spurred the search for a realistic relief mechanism. When the problem of unemployment grew acute in 1930 President Herbert Hoover's Committee for Employment suggested a plan calling for more efficient use of local resources.

State aid programs, such as New York's Temporary Emergency Relief Administration, sprang up as unemployment continued to grow. An estimated 4,000,000 workers were idle in 1930 and, by 1933, the number approached 15,000,000.

On July 21, 1932, President Hoover signed the Emergency Relief and Reconstruction Act appropriating \$300,000,000 in federal funds for unemployment relief loans to the states at three per cent interest.

In May, 1933, another law—the Federal Emergency Relief Act—was enacted. This law appropriated \$500,000,000 and empowered the relief administrator to use half the money for grants to the individual states. The states were entitled to receive one third of the total amount of their own relief outlays. The other half of the appropriation could be disbursed according to greatest need and without the requirement of matching expenditures.

All matching requirements were subsequently eliminated and the relief administrator issued grants as he saw fit. The Federal Emergency Relief Administration spent more than \$3,000,000,000 in grants under different acts of Congress.

Underlying the increasing federal manipulation of relief programs was the rationalization that the needy had become a national responsibility, to be met by national programs, despite the historic separation of federal and local responsibilities in such matters.

As the depression continued, "plans" designed to subsidize depression victims, particularly the aged, multiplied rapidly and the conception of "social insurance" fixed itself more firmly in the public mind.

In 1934 President Franklin D. Roosevelt's Committee on Economic Security, after a study of social insurance, emerged with a series of potent, but statistically

questionable, findings on the economic status of the aged as a class.

These findings were used to justify passage of the Social Security Act, in 1935. This law provided for, 1, monthly payments to retired workers in trade and industry and, 2, federal relief payments for the aged not covered. The money for retirement benefits, termed Old-Age Benefits, was to come from equal contributions by workers and employers.

Social Security amendments of 1939 broadened the program by extending monthly payments to dependents and survivors of insured workers. At the same time Congress coordinated Railroad Retirement and Social Security wage credits for survivors benefits under both the Social Security Act and the Railroad Retirement Act.

Amendments to the act in 1950 did three things:

1. Extended OASI coverage to many self-employed persons, some regularly employed domestic and farm

Benefits now being paid include:

1. Old-age insurance: payable to the worker when he retires at 65 or later, or at 75, whether or not he has retired.

2. Wife's benefit: payable at 65 to the wife of a man receiving old-age insurance benefits; if she is under 65, payable only if she has in her care a child entitled to child's insurance benefits based on her husband's account.

3. Widow's benefit: payable at 65 to the widow of an insured worker.

4. Husband's or widower's benefit: payable at 65 to the husband of an old-age insurance beneficiary or to the widower of an insured worker if dependent on his wife for support.

5. Child's benefit: payable to dependent children under 18 of insured workers who die and to the children of men or women receiving old-age insurance benefits.

6. Mother's benefit: payable upon an insured worker's death to the widowed mother of a child receiving child's insurance benefits. The divorced wife of a deceased worker may receive mother's benefits under certain circumstances.

7. Parent's benefits: payable at 65 to dependent parents of a deceased insured worker not survived by a wife, husband, or child who could qualify for monthly benefits.

8. Lump-sum death benefit: payable to the widow or widower or, if there is no surviving spouse, to the person who paid for the burial.

workers, and other groups; provided wage credits for military service in World War II (later extended to postwar period).

2. Revised the benefit scale.

3. Provided for a revised schedule of tax rates to finance the program.

Under present provisions, the employe and his employer contribute to the fund. When the employe's earnings stop because of retirement or death, the program pays him and his dependents—or his survivors. Within certain limitations, the amount of the benefit payment depends upon the worker's average earnings.

The more than 48,000,000 civilian workers which the program covers in an average week represent nearly eight out of ten jobs in paid employment, according to the U. S. Department of Health, Education and Welfare.

Excluded from coverage are farm operators, the professional self-employed, farm and household workers not regularly employed, and public employees covered by separate retirement plans.

At present about 69,000,000 persons are insured. Of these, about 27,000,000 have worked long enough to be eligible for benefits even if they do not continue to work in occupations covered by the law.

The difference between receipts and disbursements for the program is credited to a trust fund, which is then invested in government bonds. In calendar 1953 social security tax contributions received were \$4,000,000,000. Interest on investments held by the trust fund added another \$400,000,000. Benefit payments were \$3,000,000,000 and administrative expenses were \$90,000,000, leaving a net of \$1,310,000,000 to be added to the trust fund. There was a balance of \$18,700,000,000 in the trust fund at the end of 1953. Under law, this fund can be used only to pay old-age and survivors insurance benefits and the cost of administering the program.

Students of the subject have noted a number of serious defects in the present system. The most glaring deficiency inheres in the fact that some 20 per cent of the nation's employed are still not covered by social security—although the system has been in operation more than 17 years.

Moreover, only three out of ten persons over 65 draw OASI benefits. Approximately six out of ten aged persons in the United States are ineligible for Old-Age and Survivors' Insurance benefits. Virtually none of these persons will ever be able to qualify for benefits under the OASI rules as they now stand.

As of Dec. 31, 1952, there were an estimated 13,305,000 persons age 65 and over in this country; of that number 3,824,030 were drawing OASI benefits.

This leaves 9,481,000 aged persons or 71 per cent of the population age 65 and older not drawing benefits. Of this segment, approximately 1,440,000 or 11 per cent are fully eligible for OASI benefits but not currently on the benefit rolls, principally because most of them are working.

This leaves about 8,041,000 or six out of ten of the aged population who are neither drawing OASI benefits, nor eligible for such benefits.

The OASI system provides survivors' benefits to children under 18 and their widowed mothers. But more than 40 per cent of widowed mothers and orphans are at present denied such benefits.

END

We are wasting

WE ARE WASTING the largest single element in our national wealth—the structures that we have erected over the years.

The National Bureau of Economic Research has estimated that the 1948 value of all structures, exclusive of the land on which they stand, is \$358,000,000,000 out of a total national wealth of \$797,000,000,000. More than two thirds of this wealth in structures—\$245,000,000,000 worth—is in privately owned, non-farm buildings: houses, apartments, hotels, stores, office and loft buildings, garages, factories.

These buildings make up our towns and cities—in a very real sense, they are our towns and cities. Along with the buildings is an estimated value of nearly \$50,000,000,000 for the land on which they rest. This value is endangered, too, because land values ordinarily do not increase if neglect of its buildings lowers a community's vitality.

The facts of neglect are plain to any passing observer—the traveler who enters the city by rail through its dismal back yard or who motors through its slums on the way to the airport, or who lifts his eyes above the store fronts on main street. Deterioration stares at him everywhere, even in some of the most active new building districts. More than the normal depreciation to which all such investment is subject, it is the kind that implies discouragement with the investment itself.

The reasons, or the excuses, for this undue depreciation are many. Materials shortages and actual restrictions on their use during the war and postwar years brought an abnormal deferment of maintenance and repair. The high cost of doing the work, in relation to the income to result from it, has been another deterrent. This unsatisfactory relationship, so far as residential buildings are concerned, has been due partly to the rigidities of rent control. With this a thing of the past, except in New York City, Boston, and a few other places, this particu-

lar obstacle is being removed; but still other discouragements often make adequate maintenance expenditures seem not worth the candle.

These mainly stem from our failure to make our cities, and especially the older districts of our cities, attractive places in which to live, work, and invest. Just plain bad municipal housekeeping ranks high here. Failure to abate the smoke nuisance, indifferent collection of trash and garbage, neglect of street maintenance—all such derelictions thwart the efforts of property owners to maintain their buildings in good condition.

Deterioration spreads particularly under conditions where it is possible to profit from it. Where cities permit dwelling structures to be excessively crowded, where they lack or fail to enforce strong safety and sanitation ordinances, where they carelessly allow variations from zoning laws or permit illegal conversions of property, unscrupulous owners can gain at the expense of both the public and the property. Moreover, so long as such conditions are permitted, other owners in the neighborhood are deterred from attempting improvements, and new investors are flagged away.

Other reasons for the neglect of the older districts of our cities lie in the laxity of our effort to keep them modern. Sometimes what is needed is fairly simple to accomplish, like better street and alley lighting. Sometimes more drastic measures are called for. In some places, especially in commercial areas, provision for off-street parking may be needed. In other cases it may be desirable to replan through-traffic routes; or remove nonconforming land uses, or clear away space for parks and playgrounds; modernize or rebuild a rundown school.

Any of these, or similar moves, along with good municipal housekeeping and enforcement measures, may be the spark needed to give an old neighborhood new life and hope. The expenditures for better munici-

pal services and the needed public improvements may seem large but are likely to be small in comparison with the depreciation of capital, the moving away of population and business, and the loss of tax revenue that may result if the improvements are not made.

All of these lines of attack on the problems of deterioration are vital. At the root of them, however, is the stubborn fact of public apathy and indifference. Sloppy municipal administration, negligent law enforcement, and laggard public improvement policies would not be so widely characteristic of our cities if the people who live in them and depend on them were alert to what is happening, understood the inevitable results of inaction or misdirected action, and did something about it.

Until this alertness is aroused and the will to act stimulated, nothing much will happen except the continuation of urban decline and of the attrition of our greatest capital investment.

The halt of deterioration is plainly the biggest task confronting the dwellers and workers in cities. The task must be undertaken to prevent the unnecessary loss of investment in private property. As a matter of common sense economics, it should be done to keep existing structures competitive in the market—not by exploiting neglect, as is done in slum property, but by keeping buildings legitimately useful so long as it is profitable to do so and by getting rid of them when this is not possible.

Actually the toll of deterioration goes beyond the areas most directly affected, because the loss of tax revenue caused by depreciation puts an added tax burden on other property, thus increasing the drive to decentralization which is pulling the older cities apart.

Finally, the fight against deterioration taps a vast market for construction labor, materials and equipment. The market is not only large but it is unending, because deterioration begins as soon as a building is com-

our > URBAN WEALTH

pleted and is present as long as the building can serve an economic or socially useful purpose.

The market for repair and improvement work is significant for every businessman concerned with the manufacture, distribution or assembly of building products, especially in a time when some weakness may appear in the demand for new construction.

The construction and civic development department of the United States Chamber of Commerce has estimated that the current expenditure for maintenance, repair, and improvement of residential buildings alone may be as large as \$6,600,000,000 annually. The corresponding yearly outlay on nonresidential structures must be something in the neighborhood of \$3,000,000,000 to \$5,000,000,000. Yet large as these figures appear—close to the total yearly expenditure for all new residential construction—they are far from what might be spent if the full opportunity for such work were being realized. In all probability the figures could be increased at least by half—perhaps even doubled—if a concerted drive for such work could be made.

The opportunity is not confined to those directly or indirectly engaged in building activity. The maintenance and improvement of real property stimulates the desire for improving furnishings and equipment. Even in the slums of Baltimore it was found that, after the yards and dwellings had been put in decent shape, a new pride in living appeared, and curtains, furniture, refrigerators, and other items were bought.

Strong as are the civic, social, and broad economic motivations for maintenance and improvement, they become even stronger when translated into business prospects.

These prospects are certainly worth going after. If there ever was a case where a drive for more business means also a drive for a better community, this is it. In this case the

reverse also is true. Unless the effort for general improvement is supported, the business opportunity is likely to be lessened. The business drive, therefore, must also be a community drive.

If the drive is to develop a real head of steam, what is to be done? Specifically, what can the individual citizen do? Here is a program to chew on:

1. Property improvement begins at home. Keep your own house, store, or factory in good shape. Much has been said about the baleful influence of the rotten apple in the barrel. But here it can work the other way. The individual good example often prompts others to do likewise. Moreover, if one is not concerned about the condition of his own property, he is not likely to be alert to conditions in his neighborhood or in the community as a whole.

2. Watch the drift in your own neighborhood. It is the first breach of protective covenants, the first conversion, legal or otherwise, to a building use inharmonious with the rest, that may start the neighborhood on the down grade. Again, if citizens do not have the will and the ability to protect their own neighborhoods, they are not likely to be effective on a broader base. Therefore, join in neighborhood protective and improvement movements. Help others to be as concerned as you are.

3. Work to give your city a better living and working environment. A few years ago smoke made Pittsburgh a place to escape from rather than live in. The successful drive to end air pollution in Pittsburgh, probably more than any other one thing, gave the city a new spirit and started a chain of improvements that have carried it to the very front of postwar activity.

Effective municipal services—garbage collection, trash removal, police and fire protection, street maintenance, good schools and the rest—can be had if the people want them badly enough to work for them. Though the job is long and arduous,

slums can be cleaned up, as Philadelphia, Los Angeles, Baltimore, New Orleans and other places have demonstrated, if citizens demand that property ownership carry with it a reasonable responsibility.

4. Help to give your city better building, occupancy, repair and maintenance laws, and planning and zoning laws, so that good property can be protected and exploitation prevented. Cooperate with your local chamber of commerce, home builders association, real estate board, and other groups working for a better community.

5. Understand what the federal government is trying to do to encourage property and community improvement. This year legislation is in Congress which will make it possible for the Federal Housing Administration to insure unsecured property improvement loans on a broader scale than before and to insure mortgage loans on existing houses on the same generous terms as for new building. Under the term "urban renewal," Congress is considering making grants available to cities, not only for cleaning out the worst of slums but for helping any sort of neighborhood improvement project—parks, playgrounds, street changes and improvements, utilities, and so forth—which will halt deterioration and encourage new investment.

Above all, it is essential to keep in mind that things don't happen by themselves. They only happen when people—individuals in their own various capacities—make them happen. Government can be used, but government is only what people make it and will do only what they demand.

The initiative is with each one of us. The need is here, the opportunity is here, and a great business prospect besides. We can better our markets by bettering our cities, and in bettering our cities find new stimulus for our markets.

END

—MILES L. COLEAN



WATERWAYS' LOAD: BIGGEST IN HISTORY

Towboat traffic jams
are commonplace now as industry
moves its wares in record quantities
on the nation's rivers

By LAURENCE GREENE

YOU CAN'T very well call him "Ol' Man River" any more. He's still the crotchety, cantankerous, unpredictable devil he's always been, but he's "totin' dat barge" at a record-breaking rate.

Tonnage carried on the Mississippi river system, including the Gulf Intracoastal Canal, totaled more than 158,000,000 tons in 1953, according to the best conservative estimates. This tonnage included virtually everything needed for mass production—coal, steel, chemicals, petroleum—plus such incidentals as enough wheat flour to make New Orleans the No. 1 port in flour exportation.

The Gulf Intracoastal Canal, running from Carrabelle, Fla., to Brownsville, Tex., and the Ohio River are at times so jammed that tows must wait more than 48 hours to clear a lock. The Mississippi, while open from New Orleans to Cairo, Ill., had its own troubles navigationally in 1953, when the water was at its lowest level since records first were kept in the '80's.

A deskbound mortal in New Orleans, bemused by the staggering figures of inland waterways traffic, remarked sadly, "There isn't any romance on the river any more." He was wrong on two counts. The figures are romantic, in their way, and so are the new-day techniques in navigation. There is no more resemblance between the modern, high-speed diesel towboat and the old packet than there is between the Staten Island ferry and the *Queen Mary*. But even though no *Robert E. Lee* beats a *Natchez* to St. Louis in three days and 18 hours (a record, incidentally, which has stood for 83 years), the little towboat, looking like an

LEON TRICE



STANDARD OIL CO. OF N. J.

The journey of the towboat Cherrystone starts in the barge line office, above, where a landlubber uses small wooden models to plan the massive tow of oil barges. Opposite, the tow passes New Orleans, pivotal point on Pittsburgh run

uninspired slavey from the shore, has her high moments—and plenty of them.

Let's look at the figures which have so much to do with industrial production wherever the inland waterways reach. A few comparisons will show the enormity of the hauling job the 20 major, 80 minor barge lines on the Mississippi system are doing.

An ordinary tow—the Jordan River Lines' *Cherry-stone*, for instance, pushing 9,000 tons of petroleum products from Houston to Pittsburgh—does a job that would require 830 tank cars of 8,500 gallon capacity, or 1,300 tank trucks of about 5,000 gallon capacity.

A coal barge can handle from 1,000 to 3,000 tons—20 to 60 rail carloads—and will constitute part of a tow of as many as 16 barges.

The contribution the inland waterways are making, then, is that of the heavy laborer—the movement of those essentials to industry and commerce at a cost sufficiently low to make the over-all economic figure a sound one. The star of the show is the towboat, a squat rectangular craft without the slightest outward appearance of the excitement it contains.

We live in a land of provinces. The Easterner conceives the West to be entirely peopled by Hopalong Cassidys. To the Southerner, damyankee is a fact and a single word. To the landsman, life on the Mississippi remains unchanged after a century.

We have all been told, in song, story and technicolor, what a Mississippi river boat is: a glamorous stern-wheeler, belching smoke and flame from a pair of stacks with crowns on them. On her lower deck the Negro roustabouts "lif' dat bale" to the rhythm of mellow

spirituals. Above them the snake-slick river gamblers puff on elegant cheroots and wicked ladies slink about, exuding the scent of magnolia. High above them, on the *texas*, is a god called Pilot.

So it was, when Mark Twain wrote. But not today. The packets were built for speed and their pilots geared to competition, with the result that between 1812 and 1850 more than 1,000 boats blew up or were otherwise wrecked, bringing death and injury to some 4,000 persons.

The towboats, so scientifically contrived that models are tested in basins before building begins, are small and slow. They are built to do a job, with speed secondary to safety. The pilot, likely to be a young man in a sport shirt who would go green if he tried a chew of tobacco, is assisted by every possible gadget, from radar to a tow-long public-address system. Electronics permit him to run in all but the densest fog and he would guffaw at the notion that he tie up at night, as his father did.

For all of which he is still the god called Pilot. They can invent electronic devices until the next millennium sits down to breakfast, but Ol' Man River will never stop thinking up tricks only a man can cope with. The pilot must bring to his job a seasoning gained from countless trips on the Mississippi and her tributaries, a sixth sense for vagaries of drift and current, an acquaintance with a thousand bends and bars.

Day and night, the radiophone is in constant use. Pilots miles apart discuss conditions on their stretches of river, warn of traffic jams and obstructions and agree on the best way they can pass each other. The skipper

THE CRUISE OF THE "CHERRYSTONE"



Tow leaves Houston on Gulf Intracoastal Canal, swings into Mississippi at New Orleans, then proceeds north to enter the Ohio at Cairo, Ill.

Skillful navigation brings the Cherrystone through one of 53 locks on the Ohio



Towboating builds appetites, and affection for the cook



PHOTOS BY CHARLES NELSON—BLACK STAR



Ghostlike in the morning mist, the tow nears its destination—Pittsburgh.

of a modern towboat is in constant touch with his home and office through the marine radiophone. He has a gyrocompass which shows him instantly the slightest change in his tow's course, so he can compensate at once to keep the bow from going out of control. The depthmeter—which calculates the water depth under the hull by electronically computing the time it takes a sound wave to bounce off the river bottom—not only saves the pilot from going aground but allows him to cut closer corners.

This last, with the bow steering-engine now in the final stages of experimentation, saves many miles on a long trip.

All of that may be called the simpler side of river navigation. The tough part is in the handling of the tow from what the pilot can see with his own eyes—the swirl of current on a buoy, say, or a landmark picked up in the beam of one of the 10,000 candlepower searchlights.

The movement of bulk cargo by towboat is much more than a business of so many thousand tons transported so many hundred miles. There are men in the story and since they are of a new type living by old traditions, they are as interesting as any aspect of the whole tale.

On the river, it is not too wise to refer to Mark Twain. To the world at large, he is the timeless authority of life on the Mississippi. But the new breed has a pride of its own and spares him scarcely a glance. In the words of Capt. Don J. Cosgrove, at 47 a veteran with 30 years on the river:

"You Yankees put me in mind of old Cap'n Snake-lips Jones, with all your talk about Sam Clemens. Mention him an' Snakelips'd fly into a fair frenzy. 'Pilot?' he'd holler. 'Pilot hell! Why that Mark Twain wasn't nuthin' but a damn old writer! He couldn't stoke a pilot house stove, let alone steer a boat!'"

In Twain's day, and even as recently as the depressed '30's, the riverman was a low beast. He was considered "half alligator, half horse." Pilot Gentry Lowe, of the *Cherrystone*, is another of the young men, and he remembers working for 50 cents a day, his work year one of 365 days except when the boat was tied up, and his workday "a thing of 18 hours—and all hands on deck in off times to lash down a broom!"

The beginning of the great change may be said to

date from 1939, when a New Orleans lawyer financed the construction of the first high-speed diesel, the 750 h.p. *Bull Calf*. Advocates of the stern-wheeler ridiculed him, but in no time Joe Jones proved he had the answer to cheap, heavy-duty towboating.

The *Bull Calf* was a prototype, no more. Improvements came swiftly. The average riverboat built in the past ten years is a twin-screw diesel with 1,000 h.p. in each engine. She may have a Kort nozzle, a patented cylinder housing her propellers (or wheels, as the rivermen call them), which will add from 25 to 35 per cent in thrust by a sort of jet action. Triple-screw vessels turn up as much as 5,400 horsepower, and can drive a tow of 20,000 tons in 15 barges upriver at a steady seven miles an hour.

The coming of finer boats brought a better class of men. There is virtually no unionization on the rivers, except for the Masters, Mates & Pilots (AFL). Yet the deckhand and the oiler work under ideal conditions of time, pay and living comforts. The rate for a deckhand-oiler is about \$200, with the former eligible for a \$20 increase when he qualifies for a Coast Guard tankerman's license. Pay goes up to \$675 for pilots and \$850 for captain-pilots. The schedule is 30 days on and 15 off; many men let their time pile up and then give themselves a two-month vacation with pay.

There seems to have been a wordless competition between owners of the boats and the crews, all looking toward a better tomorrow. Today, the average deckhand is a youngster, perhaps just out of college, with his eye on a pilot's license. He is as proud of his boat as her owner, and he respects every improvement made on her.

One of the newest and finest of the Mississippi towboats is the *Joseph Chotin*, of the Chotin Lines. Seen from the riverbank, she is a workhorse, sparkling white but still a drudge. Inside, however, she has the appearance and comforts of a small yacht. The rooms are walnut-paneled, each with double bunks. There is a bath connecting each pair of staterooms. Her lounge is small, but as comfortably appointed as anything you would find on a cruise boat.

She even has a guest stateroom, complete with twin beds, dressing table, indirect lighting, private bath, and a separate dining room.

The food served on the *(Continued on page 103)*

BRILLIANT BOSS OF ATOM'S FUTURE

*As general manager of the Atomic Energy Commission
Maj. Gen. Kenneth D. Nichols has the
terrible responsibility of keeping the U. S. out
in front in the atomic arms race*

By LOUIS CASSELS

THE management of the world's biggest industrial empire is the worry of a man who has never met a payroll, mapped a sales campaign or attended a directors' meeting. In fact, he could list his entire career in private business on a single line of his employment record:

Delivery boy, Cleveland Grocery Store, 1923-24.

The men who hired him to run a multibillion dollar manufacturing enterprise knew that he lacked the kind of experience that normally would be considered indispensable for a top executive. But they also knew that he would not be handicapped by his unfamiliarity with sales charts, stock issues and profit statements. For his extraordinary organization has neither salesmen nor stockholders, and it is not expected to show a profit.

All it is expected to do is to keep the United States out in front in the atomic arms race, and for that terrible responsibility Maj. Gen. Kenneth D. Nichols is well qualified.

The new Goliath of American industry, whose management Nichols assumed last Nov. 1, is the U. S. Atomic Energy Commission. Because it is government owned and because its operations are cloaked in secrecy, few Americans realize that the AEC has become the nation's biggest manufacturing concern.

But, if gross book value of plant assets is taken as an index, the AEC outstripped General Motors more than two years ago. Within the past year, it moved ahead of U. S. Steel. When the current expansion program is completed, its total investment in plant and equipment will

approximate \$8,000,000,000. With many of the nation's best corporations serving as contract operators, it maintains more than 50 major production and processing installations in 20 states; it holds title to 3,000 square miles of land, an area larger than the states of Delaware and Rhode Island combined; and it is the nation's biggest consumer of electric power, using about five per cent of the total U. S. output. Through its contractors, it employs upwards of 150,000 persons and its annual operating costs now approach \$1,000,000,000.

If the size of the nationalized atomic industry is awesome, its complexity is even more so. The production of an A-bomb begins in the sweltering jungles of the Belgian Congo, the arctic wastes of northern Canada or on our own Colorado Plateau, when radioactive rock is scratched from the ground and put through an initial processing to separate the small quantity of valuable uranium ore from the great mass of unwanted carnotite or pitchblende in which it is imbedded. The partially refined ore is then shipped to one of the AEC's numerous feed materials plants. There tons of ore are reduced, through intricate chemical and metallurgical processes, to pounds of pure uranium metal or liters of uranium hexafluoride gas.

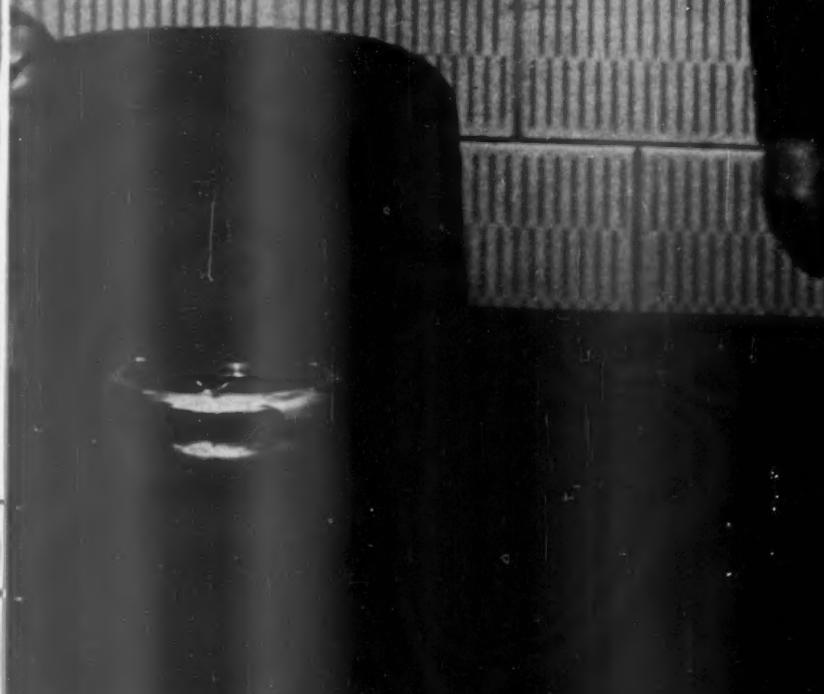
The former is shipped to the AEC's production centers at Hanford, Wash. and Aiken, S. C., to be converted into plutonium. The latter goes to the gaseous diffusion plants at Oak Ridge, Tenn., Portsmouth, Ohio, and Paducah, Ky., to be refined into uranium 235. At still other,

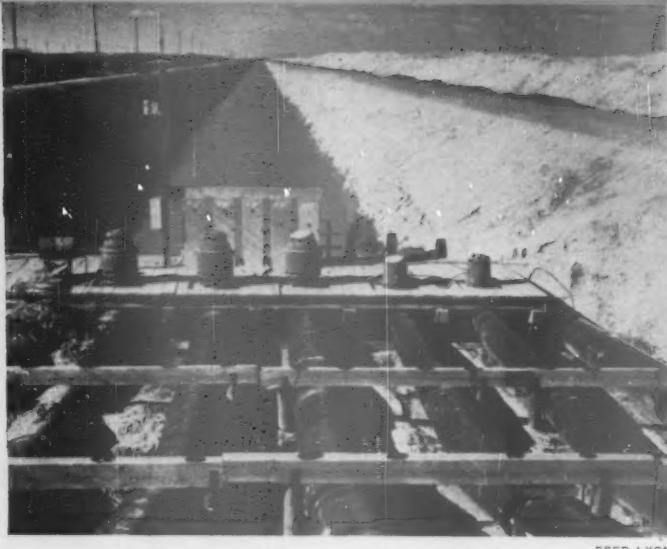
highly secret sites, the two kinds of fissionable material are machined into precise shapes and assembled into weapons. A few of the finished products are sent to the Eniwetok or Nevada proving grounds for testing; the rest go into deep underground storage vaults, to await a delivery date which, the producers hope, may never come.

The AEC's top policy-making body, corresponding to the board of directors of a private firm, is a five-member commission headed by Chairman Lewis L. Strauss, a former New York banker. Day-to-day control over the actual operation of the vast production complex is in the hands of the general manager, a \$20,000-a-year executive whose title would be president (and whose salary would be larger) if the AEC were a private corporation.

From 1950 until last fall, the general manager's office was occupied by Marion W. Boyer, Esso Standard Oil Company's able and amiable vice president in charge of manufacturing. Mr. Boyer was drafted from industry with the understanding that he would run the atomic program for three years. When he returned to Esso Standard, it was generally assumed that the commissioners would ask some other big corporation to detail an experienced executive to replace him. Instead, the commissioners reached into the Pentagon and tapped General Nichols, the Army's bald, brilliant and sometimes belligerent chief of research and development.

The appointment of a West Point-trained career soldier shocked some
(Continued on page 85)





HOW'S

AN AUTHORITATIVE REPORT BY THE STAFF OF THE CHAMBER OF COMMERCE OF THE UNITED STATES

AGRICULTURE

For the second straight month the index of prices received by farmers has advanced. It is now more than four per cent higher than in mid-November.

Prices for hogs and beef have advanced an average of eight per cent in a month. Commercial vegetables are up more than 12 per cent. Smaller increases for lambs, chickens, wheat and hay mainly account for the rest of the rise.

In general these increases reflect a seasonal tapering off in marketing. Storing of large quantities of farm products under the price support program has given prices an artificial boost.

The fact that since July, 1953, our farm exports have been higher than in the corresponding period of 1952-53 reflects the greater emphasis the Agriculture Department is giving farm markets.

Although prices paid by farmers continue to climb, the parity ratio for mid-January was at 92, the most favorable level for farmers in six months. In summary, it appears that farm prices are beginning to firm up. Assuming average weather conditions, this will be a good year for farmers.

CONSTRUCTION

Commercial construction in 1954 will be one of the brightest spots in a generally good construction picture.

Expenditures for office buildings, loft buildings and warehouses, as a group, are expected to be about 15 per cent greater than in 1953. Outlays for stores, restaurants and garages are forecast at least six per cent more. Adding hotels, motels and commercial recreation buildings brings the total to nearly \$2,500,000,000 compared with some \$2,200,000,000 in 1952.

After four years of high-volume building, New York City has less than one per cent vacancy in first-class space and nearly 6,000,000 additional square feet of space under construction or in prospect. Pittsburgh still has plans ahead. Boston, Philadelphia, Chicago, Baltimore, Washington, Atlanta, Dallas, Houston, Denver, Los Angeles and San Francisco have new space planned.

Regional shopping centers, striking features in suburban landscapes, also promise to add to the construction total.

CREDIT & FINANCE

Last month's Treasury Department refinancing of maturing and redeemable issues re-emphasizes the intent to space out maturities and increase yield.

In commenting on the terms of the new issue, Secretary Humphrey indicated that the debt limit of \$275,000,000,000 is the only thing standing between the Treasury and sale of a longer term bond for cash.

Considering the recent renewal of

the Presidential request for a \$15,000,000,000 increase in the debt limit, it appears that the Treasury has readied its plan to make a long-term cash offering if the Congress acts favorably or grants any portion of the proposed increase.

DISTRIBUTION

Competitive markets are bringing out two major areas of difficulty that need studying. Neither is likely to receive a great deal of publicity.

First is evaluating the functions the distribution process performs to determine which channels can carry out each function most efficiently. Are manufacturers attempting to do what wholesalers could do better? Are wholesalers doing what retailers could do best—or vice versa? Re-alignment of functions may mean savings that will increase pricing and margin flexibility.

Second major area of difficulty is in financing. As competition intensifies, distribution outlets find growing needs for capital. Financial institutions must not treat these problems as they existed during a period of shortages and rationing.

The "selling pitch" is working backward toward the assembly line. All kinds of firms are giving more attention to effective selling and the fact is established that, when production employees realize they are members of the sales team, production improves.

FOREIGN TRADE

"It pleased practically no one," accurately describes the impact made by the report of the Commission on Foreign Economic Policy, the so called Randall Commission Report.

This very fact might be cited as evidence that the report as a whole is a realistic compromise. It is unfortunate that so much of the comment on the document centered about the large number of dissents without analyzing the direction of dissent.

Several valid points can be made regarding them. Analyzed, they serve to illustrate the substantial degree of agreement on major issues among at least 15 of the Commissioners (Representatives Reed and Simpson dissenting completely on the whole tenor of the report and Senator Mil-

BUSINESS? a look ahead

liken preserving freedom of action on many points).

1. Many of the dissents are minor disagreements.

2. Several of the dissents go further than the Report in favoring trade liberalization.

3. Some of the dissents do not "dissent" but merely amplify the recommendations to which they refer or clarify individual positions.

GOVERNMENT SPENDING

The Eisenhower Administration's economy drive has paid off in lower expenditure estimates for both fiscal 1954 and 1955. The big question is: How much more will Congress cut?

The 1955 budget puts expenditures at \$65,600,000,000 — \$5,300,000,000 below the current year. This leaves a deficit of \$2,900,000,000. The proposed tax program would further reduce individual income taxes through Internal Revenue Code revisions, but would postpone the presently scheduled reductions in corporate income taxes and excises. If these reductions go through as now scheduled, however, the deficit will be \$4,100,000,000.

The deficit thus will hinge both upon action on expenditures and on the tax program finally adopted.

Indications are that some expenditure proposals will get rough treatment. Chairman Taber of the House Appropriations Committee has said that at least \$3,000,000,000 could be cut out, and other economy advocates are driving hard toward a balanced budget.

Since practically \$4,000,000,000 of the \$5,300,000,000 of cuts below 1954 is in expenditures under the National Security heading, further sizable reductions here are not as likely as in the government's nonmilitary operations. Some of these contain new proposals; others show substantial increases over the current year; still others, much criticized in the past, remain at about the same level.

LABOR RELATIONS

Congress has been debating the President's labor law proposals.

One of the most controversial proved to be that for the strike vote. The point here is that, when the vote is left entirely to the union, only its members have voting rights. Thus a large minority in the typical plant

is disfranchised on an issue which vitally affects each employee's pocket-book. In a unit, for instance, where only 55 per cent of the employees are union members the remaining 45 per cent would have no vote.

The secondary boycott issue, too, has caused argument. Boycotts are a basic evil because they attack neutrals. This practice should be prohibited. The Act as interpreted falls short of this. The President's recommendations actually would relax the rules governing boycotts.

Politics always makes labor law results uncertain. Congress could render a historic service by forgetting pressure groups and seeking a law that is fair to employees, employers, and the millions of neutral citizens.

NATURAL RESOURCES

The first session of the Eighty-third Congress passed Public Law 285 amending the Federal Reserve Act to permit national banking associations to make real estate loans secured by first liens on properly managed forest tracts. The Treasury Department has now defined "proper management."

National banks are permitted to make such loans in tracts:

1. Where there is organized protection against fire.

2. If hazards from insects or disease are high, effective protection is provided and conditions are such that killed timber can be salvaged.

3. If any cutting during the period of the loan is such as to insure reproduction and continued growth.

The law provides that no loan may exceed 40 per cent of the appraised value of the marketable timber offered as security. As the timber is cut, at least a portion of the proceeds must be used toward payment if the maximum loan was made at the outset. Forest loans ordinarily run two years but terms up to ten years are possible if amortization of at least ten per cent a year is provided.

No widespread use of the law is anticipated immediately. Its main importance is recognition of the fact that well managed forest property is sound loan collateral.

TAXATION

One of the President's 25 proposals for change in the Internal Revenue Code is certain to spark vigorous

dissent from corporate business. He has proposed that the Mills Plan concentration of tax payments into the first half of the calendar year be changed, over a period of five years, and a program of equal quarterly payments restored.

But, to do this, he proposes that corporations make advance payments based on estimates of income.

Under the plan, in September, 1955, calendar year corporations would estimate their income for the full year 1955, figure their tax liability for the year, and pay one quarter of the tax. A re-estimate and quarterly payment would be required in December with final payments, based on actual earnings, in March and June of 1956.

The argument in favor runs that if individuals can do it—why can't corporations?

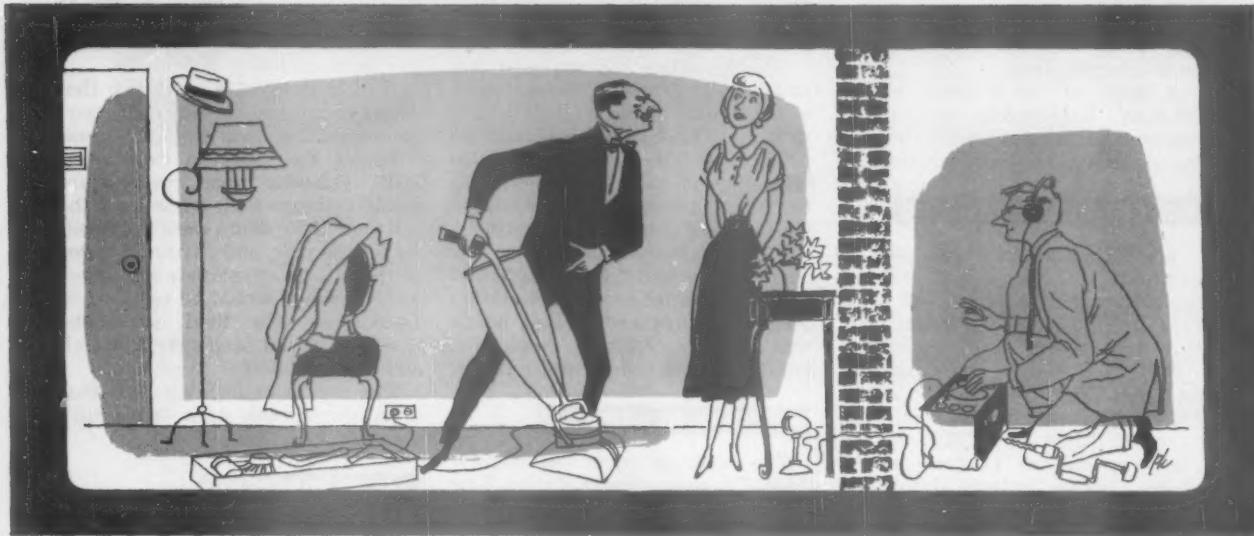
TRANSPORTATION

The reshuffling of responsibilities of existing federal transport regulatory and promotional agencies continues to be a subject of major interest in Washington. While no major changes are expected this year, the ground work will be explored for possible future action.

The tendency is to leave the Interstate Commerce Commission alone until its new managing director has an opportunity to straighten out some of its administrative problems. However, efforts will be renewed to transfer the Commission's railroad car service and general transport safety functions to the Department of Commerce. Most recent recommendations calling for such a transfer came from the Temple University Survey, a study group set up by the Truman Administration. While these recommendations are unofficial the new Hoover Commission is expected to consider them seriously in its studies of government agencies.

Dissatisfaction with federal agencies handling civil aviation regulatory and promotional functions have come to the surface. Two bills, introduced in both the House and Senate, call for abolishing the Civil Aeronautics Board and establishment of an entirely new independent air regulatory agency. At the same time, present aviation functions of the Department of Commerce would be reassigned.

it's Better Business to



In a borrowed apartment, every word—every promise—made by vacuum cleaner salesmen was recorded

SAM DOBBS grew up on a Georgia farm, attended a country school, at 16 went to work as a laborer and at 39 was sales manager of an expanding company. Then, in 1907, on a hot day in a southern courtroom, he heard his firm's own lawyer tell the court: "All advertising is exaggerated and nobody really believes it." Mr. Dobbs was shocked. He asked business friends if this attitude was prevalent, and found it was.

He resolved to change it. A dynamic, indefatigable worker, he began a personal crusade against deceptive ads. Then, elected president of the Associated Advertising Clubs of America, which was already dedicated to "honest advertising," he made his campaign nationwide. For two years he went about the country, covering 45,000 miles, talking fearlessly to groups of all sorts, naming dishonest advertisers, urging an organized battle on the evil.

Out of a fervent meeting in Boston in 1911 came the establishment of a National Vigilance Committee to eliminate false advertising of national scope. Then local ad clubs followed by setting up their own vigilance committees to combat local business abuses. But the word

"vigilance" had undesirable connotations—it suggested night-riders using tar and feathers. At an Indianapolis ad club meeting in 1916 a visitor learned that a new name was needed.

He walked to a blackboard, picked up a piece of chalk and scrawled out three words: Better Business Bureau.

The name caught on. Today there are local bureaus in 97 cities in the United States and Canada, plus a national bureau. Almost 109,000,000 persons live in areas protected by local bureaus. Most other Americans benefit, too—indirectly from the spread of higher standards established by local bureaus; directly from the national bureau's role as watchdog of national advertising and from warnings about questionable schemes which it flashes to 97 bureau cities and chambers of commerce in 700 other communities.

Originally this BBB work was done by volunteers. Then in 1914 the Minneapolis bureau set a new pattern by hiring a full-time manager. Today professionals do the work, backed by some 2,000 leading businessmen serving on boards of directors and financed by funds from their own communities—much of

the money from the very firms being policed. Each bureau chips in three per cent of its budget to finance a BBB association which coordinates their work but does not boss them. The local bureaus, the national bureau and the association form a network that has become an integral part of our national economy. Not long ago the *New York Times* referred to them as "the Paul Reveres of the business world."

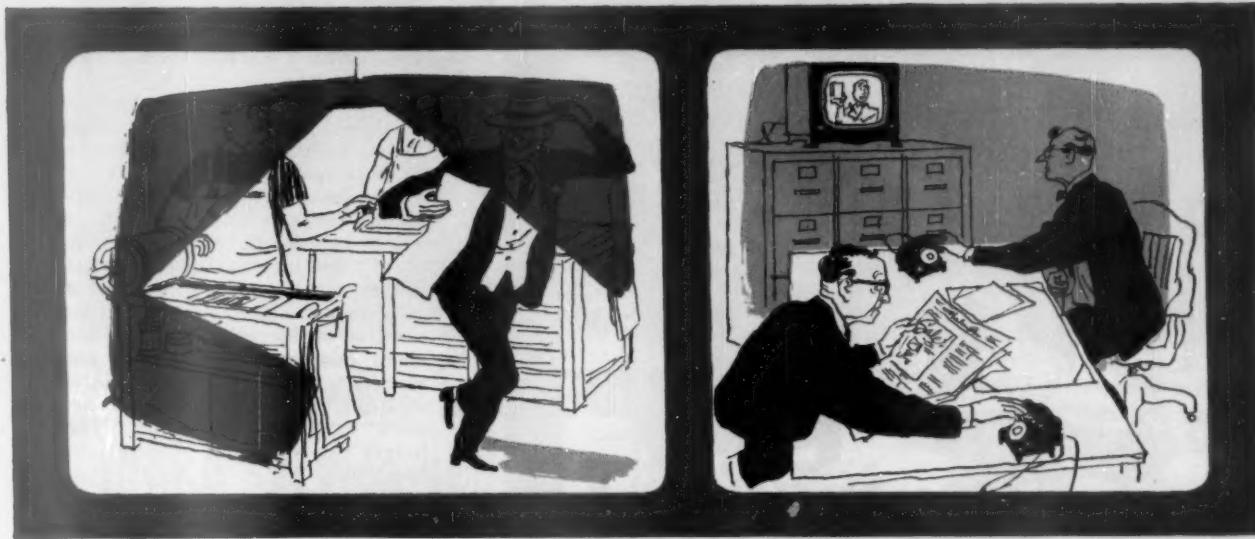
Many of the local bureaus were brought into being by local chambers of commerce. Some of them were outgrowths of a chamber of commerce committee on better business.

In many cities too small to support a BBB with a professional staff the local chamber of commerce has a Better Business Division or Better Business Committee. More than 700 of these divisions and committees carry a voting membership in the BBB. In addition, in still smaller cities better business work is carried on by chamber of commerce committees which work closely with the BBB in the nearest large city. Meanwhile there is expansion along two lines: more chambers of commerce organizing better business committees and more chambers

investigate first

For nearly 40 years businessmen have policed values to assure fair play for customers in their communities

By DON WHARTON



HOFFMASTER

Representatives arranged for advance proofs of ads to check to see if they were fakes

In only six months the BBB eliminated 149 examples of objectionable advertising

studying the need for organizing an independent, professionally staffed BBB.

Last year the bureaus handled nearly half a million complaints—for instance, 37,806 about television sales and services, 32,332 about home appliances. Any customer can take a complaint to the BBB and get free help provided he first gives the business firm involved a chance to settle it.

The bureau will act as intermediary. It doesn't say "the customer is always right" or order the merchant around. It effects many solutions simply by getting both sides down on paper for each party to read. Also, a bureau keeps score—its files on each firm show number of complaints received and percentage settled satisfactorily. Anyone, before making a purchase, can ask the BBB about a store's reliability. The reply may be "25 complaints, all but two settled satisfactorily to customers"—or "150 complaints, only six settled satisfactorily."

But the conception of any bureau as simply a monster complaint-and-adjustment desk is erroneous. So is the idea that they are mainly racket-busters. Bureaus spend less time on crooks than on legitimate business,

helping to create better business standards. They are continually initiating action. For instance, newspaper, radio, magazine and TV ads are scanned for questionable statements that are investigated without waiting for complaints. Last year BBB agents shopped 24,372 questionable ads, found 9,870 were dubious and got the advertisers to modify or eliminate 9,061 of them.

BBB shoppers bought women's skirts and sent them to labs for fiber-content analysis. They purchased golf balls to determine whether the centers really were liquid.

One trick of used car dealers is to advertise a spectacular bargain and then tell customers: "It's already sold." In Chicago the BBB arranged with newspapers to get advance proofs of such ads, sent shoppers to the lots before they opened to check if they were fakes. The New York BBB borrowed a private apartment, set up microphones and recorded every word vacuum cleaner salesmen said while giving home demonstrations.

Bureaus have tackled "mystery tune" contests which offered \$100 "credit checks" if you identified such obvious tunes as "White Christmas"

and "Sonny Boy." One bureau spotted a contest which offered checks to the "first 25" to identify the tune; the bureau had all 37 of its employees send in answers, found that all 37 received checks. Then the bureau proved that the checks were worthless. Another bureau had all employees deliberately send in incorrect answers, and they got credit checks anyway.

Most states have laws against false advertising, but often the legal approach is futile. First, prosecutors aren't likely to start a case against a store for advertising \$1 nylon hose: "Was \$1.50, now 98 cents." Second, prosecution would come too late to help customers. But the BBB stops them in their tracks. Recently a bureau spotted an ad of a department store offering women's suits substantially below regular price. BBB shoppers found something the ad didn't mention: They were water-stained suits purchased from a salvage company. The store ran another ad the next day apologizing for the error and offering refunds.

When Denver set up its Better Business Bureau two years ago, white-collar bandits were finding the city both safe and lucrative. Promoters of crooked correspondence

schools and shady mail-order outfits had made it their home. The rackets were siphoning off consumer purchasing power.

Their competition in some fields was so unfair that even good stores were forced to low levels in advertising, particularly of floor covering, shoes, furs, and jewelry. They were

shopping crew dropped off the truck in villages and towns to buy merchandise for re-weighing on honest scales.

It was found that faulty scales were costing Coloradans at least \$12,000,000 a year—and the legislature quickly passed a new weights-and-measures law to control them.



Bureau shoppers go out and buy all types of merchandise to be tested

creating some distrust of all business. The day the Denver BBB opened there were 250 inquiries and complaints. Early results were that seven sharpies using telephones to solicit funds from sucker lists left town; four correspondence schools closed; a \$500,000 insurance racket was cleaned up; a doubtful vending machine promotion was curbed. The Bureau helped raise the advertising tone in field after field by getting merchants to agree on standards. When TV came to town, in July, 1952, the bureau established an information center to protect the public—for instance, against unloading of obsolete sets. That August alone it handled 7,000 inquiries.

Then the BBB set out to make a Colorado pound equal 16 ounces. The whole state had been a dumping ground for short-weighted merchandise. Moreover, inspectors in other states had to check anything shipped out of Colorado. Tackling Denver first, the BBB sent shoppers out to buy meats, groceries and other merchandise, and found that more than half the scales in the city were off. Then a specially loaded truck was sent around the state to test scales at coal yards, livestock loading platforms, grain elevators. A

Much of the work is preventive. The day after a tornado hit Worcester, Mass., last June, a predatory army of fly-by-night contractors moved in. But early that morning Mrs. Josephine Peirce, manager of the Worcester bureau, had a long-distance call—a warning from the Providence bureau telling of its experience with crooked contractors following a hurricane. Mrs. Peirce quickly got four radio stations to broadcast warnings to property owners not to sign with a contractor until checking with her. The warnings went on the air every hour for a week. She arranged with newspapers to refuse ads by contractors who had not been cleared. She got the police to agree not to issue passes admitting contractors to the disaster area until okayed by the bureau, and she gave no okays until the applicant was checked with his home-town bureau or chamber of commerce. Mrs. Peirce shut out of the disaster area 32 contractors all set to make killings.

Four bureau managers are women. One is Muriel Tsvetkoff, an English-born musician who has been managing the San Francisco bureau for 18 years. Like many bureau managers, Mrs. Tsvetkoff has received threats

—a woman sent to prison vowed on release to throw acid in her face, a man phoned one day that he was coming to murder her. Managers also encounter abuse over the phone, bribery offers and libel suits—one for \$1,000,000 started in New York three years ago was quickly dropped. No bureau has ever lost a libel suit and no manager has ever been murdered. But there have been narrow escapes. In the 1930's the home of the Toledo manager was half wrecked by a bomb planted on the front porch.

Thirteen years later, and by then manager at Columbus, he was shot in the back by a tricky collection agent he had exposed.

Bureaus often act without complaints, for their job is to prevent as well as stop fraud. When the Memphis bureau learned that a promoter had come to town to sell a carload of salt-base antifreeze it didn't wait for autoists of Memphis to complain about damaged radiators. It put warnings in the newspapers and went on the radio with round-the-clock flash announcements. The freight car was never unloaded in Memphis.

BBB fact-finding helped break up a transportation racket which blossomed during World War II. Shady travel bureau agencies were operating behind blind classified ads saying "Going to Calif.; will take three passengers." Readers didn't know that the drivers were making a living at this.

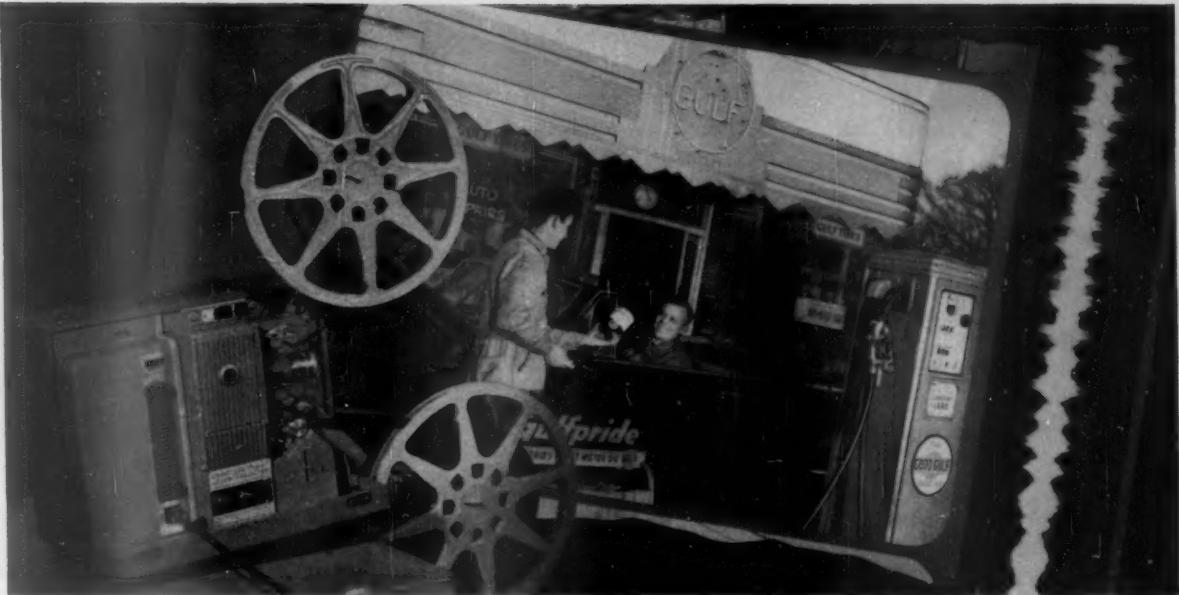
Some drivers had prison records and others were dope peddlers. Sometimes they picked their passengers up in a shiny new car, drove to the edge of town, and transferred them to a jalopy. Or the passenger was dumped at a gas station—the driver would call it a "rest stop" and disappear after explaining he had to get the carburetor adjusted. Robbery and rape were by-products of the scheme. Then the Oklahoma City BBB hired special shoppers who for two months posed as would-be travelers. They obtained names, addresses and operational data which were successfully used in the federal courts.

Examples of BBB resourcefulness are endless. Practically every published expose of financial and business schemes leans heavily on the BBB for facts. Many newspapers check on ads.

When the federal Securities and Exchange Commission was established it borrowed BBB files and made good use of them in exposing financial skullduggery.

These spectacular activities tend to overshadow the continuous BBB

(Continued on page 74)



How movies help GULF dealers make service-selling a big success

When your products are sold through thousands of outlets throughout the country, keeping dealers up to date on product improvements and selling methods can be expensive and time-consuming. The Gulf Oil Corporation, however, has found that this problem can be easily and economically solved through movies.

Easier, faster, cheaper

"Since we switched to movies, training our dealers is easier, faster, and cheaper," says a company executive. "And attendance at dealer meetings has improved."

"Movies make our training program more effective, too. Sales points are neatly tucked into the script so that they are convincing and easy to remember. And the movies graphically *demonstrate* how the dealer can make service pay off in profits. As a result, our customers get better service . . . and product sales are increased."

Trouble-free projection

Kodascope Pageant Sound Projectors help to assure the success of this film program

for Gulf. Gulf merchandising managers like Pageants because of their trouble-free performance, lightweight portability, and easy operation.

Pageants deliver more dependable service because they are designed to eliminate the chief cause of projector breakdowns—improper lubrication. They are permanently pre-lubricated right at the factory. And only Kodascope Pageant Sound Projectors have this important feature!

Ask for a demonstration

Every day, progressive companies like Gulf switch to movies to increase selling efficiency. The chances are that they can mean added sales power and lower selling costs in your business, too.

To meet your most exacting requirements, there are six Kodascope Pageant 16mm. Sound Projector models—priced from \$375. Ask your Kodak Audio-Visual Dealer for a free demonstration or mail the handy coupon for full details.

Price subject to change without notice

EASTMAN KODAK COMPANY, Dept. 8-V, Rochester 4, N. Y.

Please send name of nearest Kodak Audio-Visual Dealer, complete information on equipment checked:

Kodascope 16mm. Pageant Sound Projectors Kodascope Table Viewers Kodak High Speed Camera.

NAME _____

TITLE _____

COMPANY _____

STREET _____

CITY _____

STATE _____

(Zone) _____ 3-56

JOHN DEERE solves engineering problems with aid of High Speed Camera



An experimental sugar-beet harvester made by the John Deere Company ran into a snag during field tests. Spinning spring teeth which remove the beet tops failed to function properly.

John Deere engineers took movies of the teeth in action with a Kodak High Speed Camera. Photographed at speeds up to 3000 frames per second, the action was slowed down in projection as much as 200 times for study . . . helping the company to pinpoint the problem and provide a quick solution.

How CORNING GLASS teaches cooking on retail counters



To stimulate sales, Corning Glass Works' home economists tell store customers and sales people the advantages of cooking with PYREX® ware. Instead of cumbersome demonstration kits, each carries a Kodaslide Table Viewer and 80 full-color slides of the PYREX ware line in use.

This unique display method helps sell thousands of PYREX dishes every week. Perhaps it can help to make your product move faster.

Kodak



New engine power gets loads there with time to spare—and cuts operating costs, too!

With great new high-compression power in every model, new Chevrolet trucks for '54 bring you two mighty important advantages.

First off, you save valuable time on the job. Whether your hauls are long or short, these fleet new Advance-Design trucks let you maintain faster schedules *without driving at higher maximum road speeds*. That's because they bring you greatly increased acceleration and hill-climbing ability. You not only save time where it counts, but you save it with greater safety!

In addition, you'll save plenty on operating costs. New Chevrolet trucks bring you great new gasoline economy for 1954. All three advanced engines—the "Thriftmaster 235," the "Loadmaster 235" and the all-new "Jobmaster 261"**—give you the full benefit of thrifty

high-compression power. They're designed to make gasoline work harder and go farther on your job.

But that's only part of the money-saving power story behind these great new trucks! You enjoy lower upkeep costs and longer engine life, thanks to proved Chevrolet valve-in-head design. And something new has been added—new and even greater stamina with such features as aluminum pistons and full-pressure lubrication, plus extra strength in cylinder block, crankshaft and other vital engine components.

Drop by your Chevrolet dealer's soon and discover all the other cost-cutting, time-trimming features offered by the most powerful, finest performing, best-looking Advance-Design trucks ever built! . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

CHEVROLET ADVANCE-DESIGN TRUCKS

It's better business to buy Chevrolet trucks



NEW CHASSIS RUGGEDNESS: You get extra strength and stamina! Heavier axle shafts in two-ton models . . . bigger, more durable clutches in light- and heavy-duty models . . . stronger, more rigid frames in all models.

Completely new '54 Chevrolet trucks offer all these brand-new features—

NEW, BIGGER LOAD SPACE: New pickup bodies have deeper sides. New stake bodies are wider, longer and roomier. You can haul bigger, bulkier loads.

NEW AUTOMATIC TRANSMISSION:* Great new driving ease! Truck Hydra-Matic is offered not only on $\frac{1}{2}$ - and $\frac{3}{4}$ -ton models, but on 1-ton models, too!

NEW COMFORTMASTER CAB:

*Optional at extra cost. Ride Control Seat is available on all cab models, "Jobmaster 261" engine on 2-ton models.

Offers new comfort and safety. New one-piece curved windshield gives extra visibility.

NEW RIDE CONTROL SEAT:* Seat cushion and back move as a unit to "float" you over bumps. Eliminates annoying back-rubbing.

NEW ADVANCE-DESIGN STYLING: New, massive front-end design. New parking lights show the full width of the truck.

MORE CHEVROLET TRUCKS IN USE THAN ANY OTHER MAKE!



High vacuum does the incredible

HIGH vacuum, one of technology's newest and least known tools, already is at work in hundreds of important jobs—and there's going to be much more ado about this valuable "nothing" in the future. This prediction can be backed up by taking a look at what's being done by high vacuum to improve our way of life.

Today, improved high vacuum equipment and processes, offspring of the kind that gave birth to the first atomic bombs, are making possible the mass production of frozen citrus juice concentrates and soluble coffee, the vacuum drying of penicillin and many other antibiotic drugs, the vacuum dehydration of blood plasma, and the successful extraction of vitamins A and E from fish, liver and vegetable oils. And television tubes have a life expectancy four times longer than they used to have because scientists have learned how to harness extremely high vacuum on a mass production basis.

Steady advances in creating more rarefied vacuums have made possible all the great machines of nuclear science, as well as radar, and many other marvels. Progress is so rapid that even the vacuum engineers aren't sure what they'll achieve next.

One of the reasons high vacuum technology is becoming increasingly important is that under its influence matter can be made to assume different states almost at will. Water can be vaporized from solid ice; metals which can only be melted at atmospheric pressure can be made to boil; and beams of electrons can be directed in straight lines because they don't collide with gas molecules.

Ordinarily we consider air at sea level as quite "empty." Actually, it is packed with molecules—400,000,000,000,000,000,000 to the cubic inch! All these molecules are traveling at several times the speed of rifle bullets, and much straighter. They are colliding constantly, every few millionths of an inch, and caroming off in new directions.

Modern high vacuum pumps have been devised to sweep molecules repeatedly out of a closed container more efficiently than ever before so that fewer and fewer molecules are left behind. When a high vacuum pump is started, molecules darting about madly in the closed chamber inevitably dart upward into a "trap" from which they are sucked away. Capturing and disposing of these molecules from a closed system usually is accomplished by screens of oil vapor spouting continuously past the opening from which the molecules try to escape. As this process continues, fewer and fewer molecules are left behind in the closed chamber. Modern vacuum pumps use either oil vapor, mercury vapor

or high-pressure steam to remove all but one out of every 1,000,000,000 molecules from such a chamber. It is in this respect that such pumps, on a commercial scale, are different from any previously known; the modern advancements of high vacuum technology would be impossible without them.

A large manufacturer of fine watches is putting this "fourth state of matter" to work by annealing watch springs and other parts under high vacuum to produce brighter, untailed working mechanisms. Tons of vacuum melted steel, steel in which the tiniest air pockets are removed, are being converted into anti-friction bearings that have 300 per cent improved fatigue resistance. Supersteels of the future are profited by high vacuum technology.

Literally billions of metal and plastic decorative items have been given a smooth, glistening surface by the vacuum coating process. Among the items commonly coated now are trumpets and trophy cups, jewelry cases and radio housings, razor blade dispensers and light switch shields, costume jewelry and clock faces.

One manufacturer of toy plastic trumpets, for instance, moves hundreds of these musical instruments at a time into a vacuum chamber on a revolving jig. As the trumpets turn in the high vacuum, vapor from "boiling" metals coats the plastic surface to produce a metallic-looking trumpet.

Coating metals may be silver, gold, copper, zinc, chromium, cobalt, nickel, selenium—practically any metal or alloy. Nearly always, however, aluminum is used. It is cheap, plentiful and readily evaporated.

One pound of aluminum will lay a lustrous, tarnish-free film on 25,000 square feet of surface. This thin covering is usually only four millionths of an inch thick.

How far is this fourth state of matter going to be pushed? Not even the experts are willing to risk a prediction. We know it is likely to mean better things, faster production and some changes in our way of living.

Recently, for example, at the Brookhaven National Laboratory, high vacuum scientists have produced what are, in effect, cosmic rays of energies greater than any previously created by man. Rays of 2,250,000,000 volts have been generated by the world's first cosmotron—a Buck Rogers monster whose very heart is high vacuum.

As one scientist put it recently, "Man-made cosmic rays made possible by super-high vacuums could someday be as important as atomic energy."

END

—O. A. BATTISTA

Hertz gives you all these benefits of truck ownership...but none of its "headaches"!



1. No capital investment—Hertz Truck Lease Service supplies all the trucks you need. Releases your capital for other company finance needs.



2. Your present trucks purchased by Hertz—Hertz will buy them at mutually agreed prices, and keep them in service; or, if worn out, will replace with new ones.



3. Hertz services all trucks—Hertz washes, garages, repairs, maintains all trucks in top condition. Furnishes anti-freeze, tires, chains, etc.



4. Trucks engineered to your specifications—Hertz supplies the exactly right trucks for your precise needs. Our truck engineers are at your service.



5. All gasoline, oil, etc., supplied by Hertz—You furnish one thing only—a driver. Hertz takes care of everything else.



6. Insurance protection provided to suit you—Hertz will gladly place Public Liability and Property Damage insurance through your own broker or agent, if you prefer.



7. Extra trucks when you need them—In case of peak periods or rush loads, Hertz supplies extra trucks for such periods.



8. Easier bookkeeping for you—Instead of many bookkeeping items you have only the one bill sent by Hertz.



9. Good-looking equipment adds prestige to your company—Your trucks always look attractive. Never dirty or run-down. It's good advertising.



Look in your telephone directory under "H" for your nearest Hertz station.

HERTZ Truck-Rental SYSTEM

Hertz Truck Lease Service is most flexible. You may use all or any part of the above benefits according to your needs. On the other hand, if you prefer others which are not shown, Hertz will provide them too.

Hertz serves almost every type of business! Among Hertz customers are manufacturers, wholesalers, distributors, retailers . . . restaurants, laundries, cleaners and dyers, department stores, grocers, specialty shops, etc.

Hertz is the world's largest truck and passenger car rental organization, with a 30-year record of customer satisfaction. You, too, will find it pays to lease or rent trucks from Hertz.

For complete information call your local Hertz station or write or phone Hertz Truck-Rental System, Dept. F34, 218 South Wabash Avenue, Chicago 4, Illinois; phone WEbster 9-5165. No obligation, of course.

TOLL ROAD BOOM

10,000 miles for \$10,000,000,000



Success of turnpikes in taking pressures off free roads, speeding construction, brings a change in the attitude of those formerly opposed

By HENRY K. EVANS

A REMARKABLE about-face has taken place recently in the thinking of highway authorities. The long standing taboo on toll roads has been lifted, not because of changed concepts of highway financing principles but simply because the toll method has proven such an astoundingly successful means of producing needed superhighways in a hurry.

The federal government opposed them in the past as "an inadvisable and expensive expedient" and federal law still denies them any place in the federal-aid highway system. The truck, bus, and automobile representatives, until recently, have consistently and bitterly denounced them, too. They termed the pikes "an immediate threat . . . no solution to our highway problem . . . double taxation . . . undemocratic . . . a drain on the free-road system."

But the picture has changed. A Department of Commerce spokesman gives the federal blessing in describing the toll roads as "a sound solution for many of the costly deficiencies on the rural segment of our system of interstate highways." Even the users have warmed up to the

point of endorsing toll financing as a means of providing needed highways where they could not be built through conventional means.

According to a comprehensive survey by the Chamber of Commerce of the United States, toll roads now stretch into ten states and promise to expand ten times within the next few years.

Right now almost 1,000 miles of turnpikes—representing a \$1,000,000,000 investment—are operating, and another 1,000 miles are under construction.

In some states turnpike construction overshadows the whole state road program. Manpower and money involved are huge. The New Jersey Turnpike had 10,000 men working at one time. The American Road Builders Association reports that more than one fifth of all highway construction expenditures in 1953 involved toll projects.

This year should see completion of the \$285,000,000 Garden State Parkway in New Jersey (between the New York line and Cape May) and the \$96,000,000 West Virginia Turnpike (connecting Charleston

and Princeton) and a \$65,000,000 eastward extension of the Pennsylvania Turnpike. Scheduled to open next year are the \$55,000,000 Maine Turnpike Extension northward to Augusta, the \$500,000,000 New York State Thruway linking New York City and Buffalo; and the \$326,000,000 Ohio Turnpike across that state.

These projects, representing \$1,327,000,000 in costs, may be swelled to a total new investment of \$8,722,000,000 if all presently planned toll roads become a reality.

One toll road seems to beget another. The traffic engineer for the New Jersey Turnpike, for instance, complained recently that he lacked time for current operating problems because his desk is piled high with plans for turnpike extensions originally scheduled for consideration sometime around 1970. The reason is obvious: As one state completes a toll road, bringing it up to the border of another, pressure to hook onto the turnpike builds up in the second state. The Pennsylvania Turnpike's western extension was a strong incentive for construction of the Ohio Turnpike and James D. Adams,



"I learned to operate my Marchant in less than an hour . . . and soon took over the heaviest figuring in our office."

Any way you figure— it's MARCHANT

Whatever your figurework requirements, there's a Marchant exactly suited to your needs...and the cost is soon repaid in hours saved. The Marchant Man near you will be happy to show by an actual run on your own work that Marchant's the answer . . . any way you figure!



"Marchant gives me calculating speed up to twice that of other calculators. The work really rolls out."



"Dollar-for-dollar, I've found that Marchant tops them all for time-saving, built-in automatic features, and guaranteed accuracy control."

MARCHANT AMERICA'S FIRST
Calculators



SEND
THIS
COUPON

Just mail this coupon with your business letterhead
to get your free . . .
Index to Modern Figuring Methods . . .
Descriptive Literature about the FIGUREMATIC . . .
MARCHANT CALCULATORS, INC. • Oakland 8, California

chairman of the Indiana Toll Road Commission, declared recently that his state's geographic location gives it no choice but to build a toll road to pick up the traffic from the Ohio route.

Such incentives explain, at least in part, the prediction that this country will have from 8,000 to 10,000 miles of toll roads within ten or 20 years. As proposed, these pikes would be integrated into a system which would permit a motorist, starting in New York, to ride turnpikes via Albany to Buffalo or Boston; or, via Pittsburgh, to Detroit, Chicago or Omaha. From Chicago a motorist could continue to the Gulf of Mexico by a north-south transcontinental turnpike crossing Indiana, Kentucky, Georgia and Florida, with branches connecting St. Louis, Oklahoma City, Fort Worth, Dallas, San Antonio, Houston and Corpus Christi. Other groups are working seriously to establish an east-west superhighway from Boston to San Diego—most of it consisting of toll roads.

Such ambitious planning leads naturally to the question:

"Where is the money coming from?"

C. "Cheever" Hardwick, whose New York investment firm, Smith, Barney and Company, has handled many of the bond offerings for exist-

ing turnpikes, does not regard this as much of a problem.

"There is nothing to indicate," he says, "that sufficient private capital will not be available to finance any vehicular toll project in the United States that can be demonstrated to offer a reasonable expectancy of self-liquidation within a reasonable time."

He is confident that, wherever careful studies by qualified engineers indicate a favorable "coverage" of bond servicing charges, investors both here and abroad will rally round. But to be attractive the "coverage" must be at least 1.5; that is, the average yearly income during the life of the bonds—less operating costs—must be at least 50 per cent greater than the yearly total of interest and principal payments. Investors may be willing to proceed with lower ratios when the state or other taxing body will guarantee payments. But revenue bond projects generally run above the 50 per cent margin. The Ohio toll road issue, for instance, has a coverage of 1.95.

Besides the toll revenues, investors can usually count on income from gasoline royalties, the restaurant concession and similar auxiliary services. Last year the Jersey Turnpike took in \$1,250,000 from the 6.4 cent royalty on each gallon of gasoline. (The Turnpike Authority

points out that their gasoline is no higher priced than that on adjacent highways.) The New York Thruway Authority estimates its royalty income from all sources will run more than \$2,000,000 in 1955, its first full year of operation. Such extra income usually averages five to ten per cent of the total take and contributes further to the road's financial soundness.

Lenders have not been difficult to find. As one of the financial preliminaries to building the New Jersey Turnpike, Mr. Hardwick started out from New York City by motor with the buyer for a prominent Canadian institution. The purpose was to travel the approximate route of the proposed toll road. The party had battled its way southward past Elizabeth, N. J., through jam-packed traffic when the visitor inquired, "How far have we come?"

"Fourteen miles."

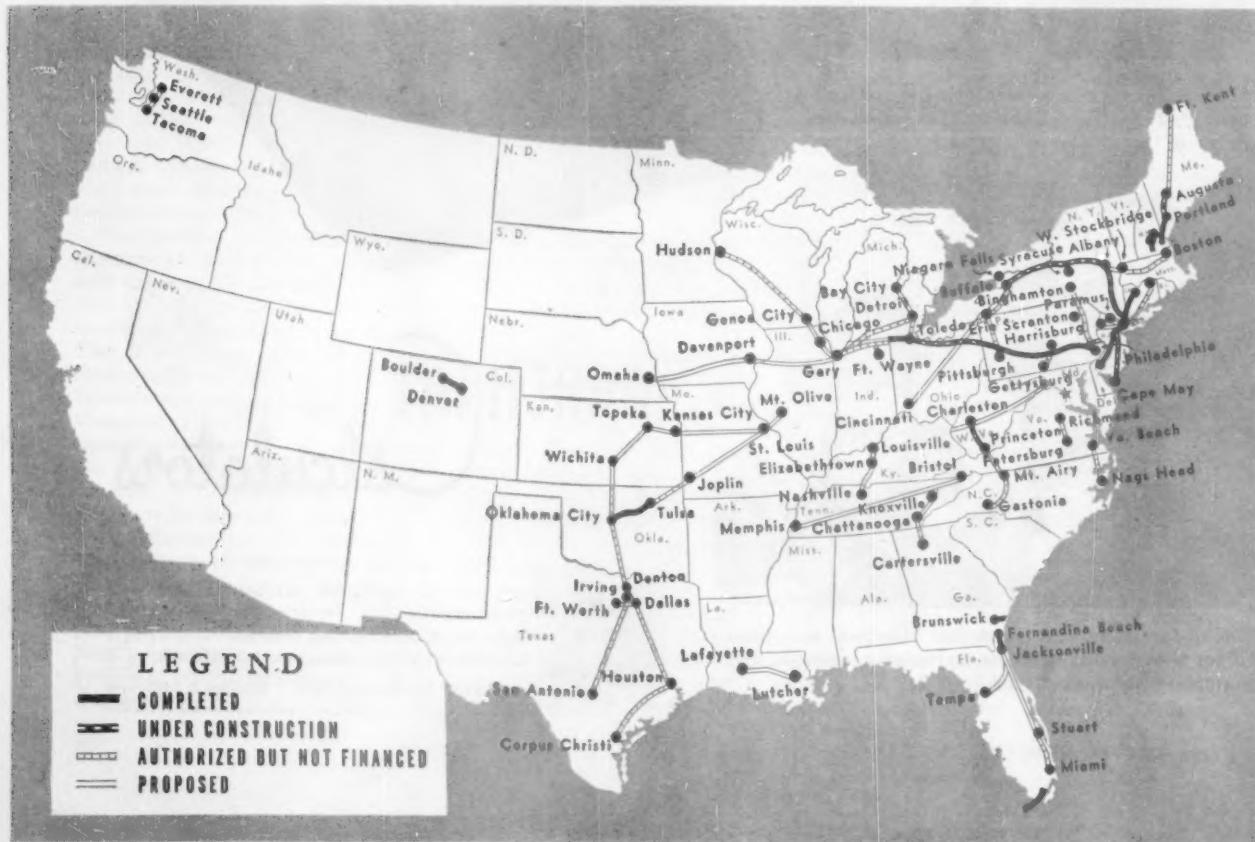
"How long will the turnpike be?"
"One hundred and eighteen miles."

After sitting quietly, watching the mass of trucks and passenger cars fighting their ways north and south, the Canadian said, "I'm sold—now get me out of here while I'm still alive." The need for a better road was obvious.

Whether that road—or any road, for that matter—should be financed

(Continued on page 75)

Present and proposed toll road mileage now totals 8,722 with expenditure estimated at \$9,358,000. Not shown here are the north-south and east-west transcontinental superhighways under serious consideration. Toll roads would be an important part of them



"Performance of new low cost office typewriter sold me!" says Minute Maid ad manager



Remington *Office-riter*

A Product of *Remington Rand*

Thousands of professional
and business men are equally
enthused! Here's why:

1. The Remington Office-riter handles paper and forms up to 11 inches wide...writes a full 10-3/10-inch line.
2. Exclusive Miracle Tab makes it easy to set up the Office-riter for statements, invoices and listings.
3. The Office-riter makes up to 10

good carbon copies, cuts clean stencils.

4. The Office-riter has a full standard keyboard, clean, sharp printwork and every feature needed to handle all your office typing PLUS the extra advantages of compact size and low cost!

A demonstration will convince you that this unique typewriter deserves a place in *your* office. Call your dealer or Remington Rand Business Equipment Center today! Convenient terms.

MAKERS OF THE REMINGTON QUIET-RITER, STANDARD, NOISELESS AND ELECTRIC TYPEWRITERS



OVERHEAD *keeps power lines* OVERHEAD

Public utilities would like to put them underground, but the cost would run more than \$20,000,000,000

By MURRAY TEIGH BLOOM

ON NOV. 25, 1950, gales, driving rain, fantastic snowfalls, sleet and floods hit the United States with such devastating force that dozens of public utility people were soon calling the disaster the "greatest storm in the history of our company."

At the height of the storm thousands of power lines were down and several million families were without electricity—a situation that awakened a chorus long familiar to public utilities men:

"Why don't they put those lines underground?"

When the same idea occurs simultaneously to millions of men and women, things happen. This single bright idea has brought about citizens' committees in Summit, N. J.,

city-conducted inquiries or threatened legislation in Miami, Covington, Ky., and Toronto and state-wide investigations in New Jersey and Connecticut.

It's not just the politicians who love these investigations. A leading trade paper, *Electrical World*, said recently:

"No matter how promptly the services are restored in the face of dire difficulties, there is a growing tendency for municipal authorities to make public issue of the extended outage [total time power is off]. They are not necessarily reaching for political capital. In this day they can honestly reflect a public attitude that electric service has become so indispensable that excuses, no matter how valid, are no alibi for chilly

rooms, kitchens without cooking and spoiled frozen foods."

"People appear to be growing more helpless and more intolerant of anything that disrupts their normal mode of life," C. A. Mullen, vice president of the Jersey Central Power and Light Company, said recently. Mr. Mullen should know. His company was one of five major utilities in New Jersey that participated in a state investigation as to why most of their lines weren't underground. In other states similar investigations are under way.

What had brought the matter to a head in New Jersey was a number of mandatory underground power line bills introduced in the state senate. The New Jersey power companies felt, collectively, like Job, harried by legislators after nature itself had thrown some of the most incredible meteorological bedevilements at them. The state has been hit seven times by outsize hurricanes, sleet and ice storms and big blows—in 1938, 1940, 1941, 1944, 1948, 1950 and 1953.

Each involved a twofold loss to the utilities—money that was lost on current that couldn't be sold because lines were down, and great costs involved in bringing in out-of-town line crews to repair the damage. The week-end ice storm of January, 1953, that hit the eastern seaboard cost the utilities several million dollars.

As if nature's vicissitudes weren't enough to contend with, the overhead lines are also the natural victims of wild motorists. It's a rare



Do top executives delegate too much responsibility?

CONSCIOUSLY, most key men probably never allow important responsibilities to get out of their own hands. But experience shows that *unconsciously* they often do. And in one *particular* matter the results can really be disastrous.

Take the matter of your firm's accounts receivable and other business records, for instance. Whose responsibility is it to see about protection for them? It had better be *yours*. For entrusting those records to someone who doesn't know an old safe can *cinerate* records might be the *end* of your business. Any safe without the Underwriters' Laboratories, Inc. label is *dangerous* if fire starts.

And being located in a fireproof building doesn't lessen the danger one bit. Fireproof buildings just *wall-in* an office fire. Make it *hotter*!

But, you've got fire insurance? Fine. But don't count on it to repay all your losses, unless you can provide "proof-of-loss within 60 days"—which takes *records*, you know.

Better delegate this—to yourself!

Experience shows that 43 out of 100 firms that lose their records in a fire never re-

open. And the others have years of tough sledding just to regain normalcy.

Write yourself a memo, today, to check the risk you've been taking. And find out how little it costs to get the world's best, and most modern protection—a new Mosler "400" Series "A" Label record safe. Consult classified telephone directory for name of the Mosler dealer in your city. Stop in. See the exclusive Mosler styling and protection features. Or mail coupon, now, for FREE FIRE "DANGERater."

IF IT'S MOSLER . . . IT'S SAFE

The Mosler Safe Company
Since 1848

World's largest builders of safes and vaults . . . Mosler built the U. S. Gold Storage Vaults at Fort Knox and the famous bank vaults that withstood the Atomic Bomb at Hiroshima.

FREE! FIRE DANGERater.

Tells you in 30 seconds how much protection your vital records need. Easy to use. Accurate. Authentic. Based on experience with thousands of fires. Figures in over a dozen vital factors about your business. Mail coupon for your DANGERater, now. Free. No obligation.



*The Mosler Safe Company, Dept. NB-3
32nd Street and 5th Avenue, New York 1, N. Y.*

Please send me (check one or both):

Free Mosler Fire "DANGERater," which will indicate my fire risk in 30 seconds.
 Illustrated catalog, describing the new series of Mosler Record Safes.

NAME POSITION

FIRM NAME

ADDRESS ZONE STATE

CITY

84%

sales increase in 2 years

Note: We have been paid \$65,950,233 since February 1, 1925 for advising business men.

These figures prove that the George S. May Company gets results for its clients!

George S. May Company Spent	
Hotels	\$406,000.00
Restaurants	\$310,000.00
Railroads	\$370,000.00
Air Lines	\$535,000.00
Bus Lines	\$37,000.00
Total	\$1,658,000.00

*Let our representative call on
you without obligation!*

George S. May Company
ANNUAL SALES
Business Engineering Service

1953

\$7,157,248

1952

\$4,951,545

1951

\$3,886,890

We practice what we preach-

*We can boost your sales, just as we
boosted ours!*

George S. May Company

THE WORLD'S LARGEST BUSINESS ENGINEERING ORGANIZATION

CHICAGO 6, Engineering Building NEW YORK 17, 122 E. 42nd St. SAN FRANCISCO 2, 291 Geary St. CANADA, 660 St. Catherine St., Montreal

It takes TWO to make it work



And it takes **TWO** communication systems to give business the complete efficiency it needs for today's quick, competitive pace! (1) Your regular city-phone service and (2) a fully automatic Kellogg System... to handle all inside calls—to free your switchboard for those incoming-outgoing calls so vital to your success!

KELLOGG INTERCOMMUNICATION SYSTEMS— DESIGNED FOR ANY BUSINESS, ANY BUDGET!

Fully guaranteed! . . . Completely automatic! . . . A Kellogg Intercommunication System requires no switchboard, needs no operator. Instantly connects you with any department or key personnel—gives you quick conferences without leaving your desk—keeps your conversations private. All stations call each other with the quick flick of a dial!

KELLOGG SELECT-O-PHONE — serves one to 55 stations. Saves time, steps, money!

KELLOGG RELAYMATIC — for systems requiring more than 55 stations. Provides for any future expansion!

Available through Kellogg's nationwide dealer service organization. Your dealer will gladly survey your inside communications problem, without obligation to you. Send coupon TODAY.

KELLOGG Division of IT&T

Intercommunication Systems

THE INSIDE VOICE OF BUSINESS

KELLOGG SWITCHBOARD AND SUPPLY COMPANY
A Division of International Telephone and Telegraph Corporation

SPECIAL PRODUCTS DIVISION, Dept. 7-C
Kellogg Switchboard and Supply Company
Sales Offices: 79 West Monroe Street,
Chicago 3, Illinois

Show us how we can save time and money with
A KELLOGG INTERCOMMUNICATION SYSTEM.

NAME _____
COMPANY _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

utility that doesn't lose four or five poles during a summer week because some driver was drunk, wild or simply skidded on a wet road. It costs \$250 to replace a pole and \$500 if the wires are broken with the pole. About two thirds of all poles hit this way cause some power interruption.

Disappointed hunters or those merely trying to sharpen their aim are also enemies of the overhead lines. They often shoot at the porcelain insulation pieces atop the pole or they put a bullet through the thick aerial cable aloft.

Harried by nature, legislators, drivers and hunters, the utilities themselves long ago began thinking of putting their lines underground. But no matter how much solid, constructive thinking they gave it they couldn't get around one major obstacle: money.

In 1948, the New Jersey utility investigating committee estimated that it would cost \$1,366,000,000 to place 19,261 miles of pole line underground. It would cost an additional \$29,500,000 every year thereafter to put normal new line extensions underground.

That was in 1948. Today the five utilities think the costs would be more than \$2,000,000,000 to get all their overhead lines underground. Estimates for getting the entire country's lines underground range all the way from \$20,000,000,000 to \$30,000,000,000.

Who would pay for it? You and I.

Most state utility commissions have worked out complicated formulas on which to base electric charges to consumers but all of them try to give the companies a fair return on the basis of fixed charges and capital investment. If the companies were able to raise the fantastic billions needed, the interest and the fabulously increased investment represented by the underground lines would reflect itself quickly in monthly bills swollen to three, four and possibly five times their present size.

In addition, it would cost the average home owner about \$100 to place his present overhead service line underground. For many families electricity would suddenly become too expensive.

Further extension of electric service to rural areas would be completely stopped. Many farmers would not be able to finance the more expensive extensions from highways to their buildings.

The cost problem is weird enough but the technical one might be even worse.

Russell G. Warner, vice president of the United Illuminating Company of Connecticut, testifying before the

state Public Utilities Commission last March, asserted:

"As loads increase underground cables have to be changed. The cable being worked on must be de-energized and all customers supplied from that section of the cable are without service for many hours. . . . Aside from the objectionable outage time for cable work—overhead lines are usually worked live—we find the cost of maintenance and of operation about twice per circuit mile than for overhead construction."

Operating records of several utility companies show that the average customer supplied from a simple underground system has more hours of electric service interruption than the average customer supplied from the overhead system. For one thing, an underground cable takes eight to 16 hours to repair, whereas the average overhead line can be fixed in only a couple of hours. Sometimes chemicals in the soil can lead to galvanic action on the lead sheath protecting the underground cable so that the wire fails.

In Hackettstown, N. J., the lines serving street lights were put underground in 1933 in the sidewalk grass strips. But now tree roots are pushing up the cables relentlessly and there is an expensive repair problem.

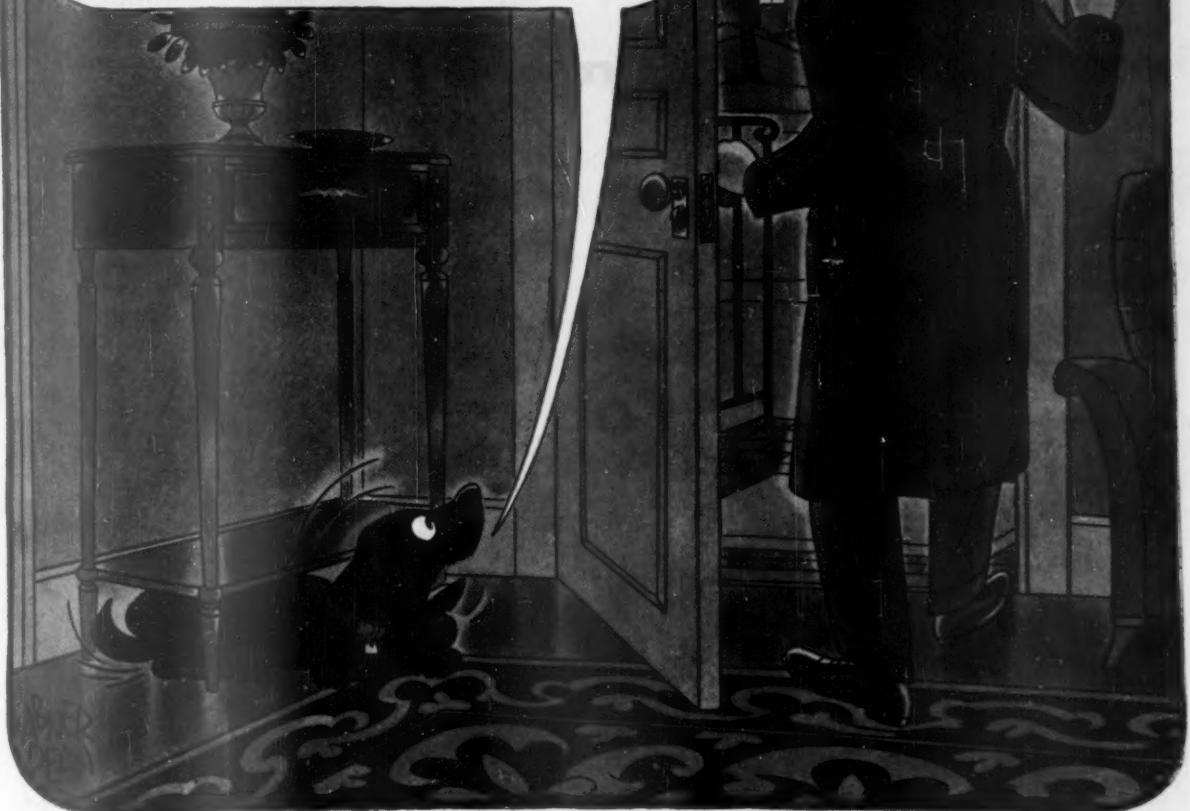
But assume for the moment that underground systems work perfectly; that utilities can somehow find the money to put the lines underground; that every home owner is willing to pay a reasonable sum to install the new lines and is bravely ready to pay electric bills three or four times his present ones for the boon of underground lines. Well, there's still another big obstacle.

Back in the depression 1930's one New Jersey utility decided that it would do its bit to relieve unemployment and at the same time get some lines underground cheaply. Although it was a modest program involving less than 50 miles of underground line, it was almost impossible to get enough skilled labor for the job. Most companies can barely get enough good men just to keep up with their regular extensions of overhead lines, let alone have a surplus of manpower to get a vast underground program under way.

Yet in spite of these powerful deterrents more than 400 American cities and communities do have underground power distribution systems. In these cases, paradoxically enough, it was actually cheaper to put the lines underground than continue them aloft.

In many downtown areas the lines had to go underground not because of storm dangers but simply because

I'M NOT AFRAID OF BURGLARS
BOSS — BUT I WISH YOU'D
LEAVE SOME LIGHTS ON WHEN
YOU GO OUT AT NIGHT!



Whether you own a dog or not, a good way to discourage burglars from entering your home while you are away is to leave lights on. The best practice is to turn lights on in *several rooms*. If you go out frequently, vary the lighting from night to night, to further deceive thieves who may be "casing" your home.

*This advertisement is published in the interest of crime prevention.
Reprints will be furnished without charge upon request.*



AETNA INSURANCE GROUP

AETNA INSURANCE COMPANY • THE WORLD FIRE AND MARINE INSURANCE CO.
THE CENTURY INDEMNITY COMPANY • STANDARD INSURANCE CO. OF N. Y.
HARTFORD, CONNECTICUT

DON'T GUESS ABOUT INSURANCE—CONSULT YOUR AGENT OR BROKER

New Broad Protection Against Thieves

The new Aetna Residence and Outside Theft Policy covers losses not only from burglary but also robbery or holdup, inside theft, mysterious disappearance, and vandalism within your home. It covers jewelry, silverware, furs, clothing, household furnishings, money and securities, and other property belonging to members of your household, relatives or guests. In addition, it covers your property while traveling, at clubs, theatre or office. Ask your local agent or broker.

THINK FIRST OF THE AETNA



Out of 90 wildcat wells drilled by Cities Service last year, over 67 were dry. And, you may say, "Bad business." But actually these dry wells represent the "good business" sense of the entire industry.

Even with all the latest scientific methods at their disposal, oil men cannot always be certain of a black-gold find beneath strange lands. What is important is that Cities Service, as well as the rest of the industry, is willing to risk huge sums on any reasonable evidence that they may find oil.

One company may decide not to drill an area, while another will say, "Let's take the risk." This is gilt-edge assurance to the nation that every possible area will be explored. It's a marvelous example of how

our free enterprise, competitive system constantly influences all American business in a direction that will always benefit the consumer.

Cities Service will continue to make new oil finds to help fill the oil larders of the nation . . . known underground oil supplies are over four times what they were thirty years ago. Cities Service will continue to drill dry wells too . . . the odds are 8 to 1 against bringing in a producing discovery well. And these hundreds of dry wells, with the millions of dollars spent on them, will in themselves serve as a monument to the constant efforts of the American petroleum industry to keep our country strong and to keep our standard of living the highest the world has ever known.

CITIES SERVICE

the overhead lines were so heavily loaded with wires, both telephone and power, and with crossarms that they became inefficient, dangerous and incredibly difficult to repair.

Yet since the end of World War II there have been a number of new suburban developments, such as the new Park Forest project outside Chicago, which have the benefit of underground power lines. In 1949, the Bellwood Park subdivision in London, Ontario, put in underground installations at only 25 per cent more than for overhead construction. How could it be done so cheaply? For one thing all 186 houses were built for rental and there was only one property owner to deal with. Also, there was no existing overhead plant to be abandoned and removed. Instead of using standard lead covered cables with numerous ducts and manholes a new plastic covered cable was used.

Of course, it's one thing to plow a cable into the soft earth at the side of a country road; it's quite another to get them into ducts under macadamized streets and concrete roads as the people of Summit, N. J., discovered not long ago.

After the 1950 storm and a consequent interruption of power for several days, a Summit mass meeting led to the appointment of a citizens' committee to investigate the possibilities of getting the lines underground.

Summit is a pleasant city of 20,000 people. On the committee with Howard D. McGeorge, chairman, were two power engineers, a CPA, a large property owner, a telephone engineer and a corporation executive.

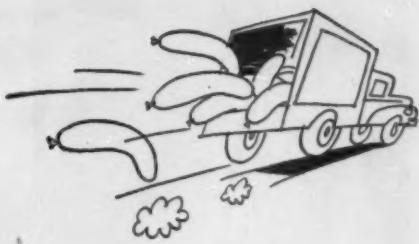
The committee found that it would cost about \$7,000,000 to get Summit's lines underground.

"It is assumed," the committee's report concluded realistically, "that the Jersey Central Power Company could not be expected to take on itself this burden for one of the many communities it serves. Whether the burden is one which could be undertaken by the people of Summit is debatable . . ."

With that report most of Summit lost interest but Mr. McGeorge personally thinks the \$7,000,000 could be raised easily if Summit would be willing to go into the power business. Under state law the city could buy power from a utility as a kind of municipal wholesaler and resell it at a profit to the residents. A few towns in New Jersey do this. Mr. McGeorge thinks Summit could make \$270,000 a year this way. He admits it's not likely to happen.

In at least two incorporated suburban areas, Winnetka, Ill., and Belmont, Mass., profits from municipi-

How to protect your business against both plain and fancy stealing



A bologna salesman down in Texas figured out a pretty plain way to defraud his company.

He drove off with a truckload of the sausage, sold it at half price and pocketed the money—\$1,117.37.

The editors of a group of pulp magazines in New York were quite a lot fancier.

They bought non-existent, detective-story manuscripts to the tune of \$96,000 over a period of three years

—and cashed the checks themselves.

As these two cases show, when employees turn dishonest, there's practically no limit to the ways they'll find to steal. And when they do pick a way—whether it's tapping the till, juggling the books or carting off merchandise—they usually spend the stolen funds long before they're caught.

Travelers Blanket Fidelity insurance, covering all your employees, protects you

fully against the consequences of criminal ingenuity at work in your business. You won't have to worry about dishonest acts OR recovering losses resulting from them.

A new booklet, *How Well Do You Know Your Employees?* just published by The Travelers, gives full details of Travelers Blanket Fidelity insurance and tells how to classify your employees for this important coverage. For your free copy, fill out the coupon below, attach to your letterhead and mail.

<p>YOU WILL BE WELL SERVED BY</p> <p>The Travelers</p> <p>HARTFORD 16, CONNECTICUT</p> <p>ALL FORMS OF INSURANCE AND SURETY BONDS</p>	<p>Please send me your FREE booklet, <i>How Well Do You Know Your Employees?</i></p> <p>Name.....</p> <p>Street.....</p> <p>City.....</p> <p>State.....</p>
---	---

ALWAYS READY*
for reproduction

ACME VISIBLE

PHOTO PANELS



* any time

Get your catalogs, price lists, parts lists, directories and indexes out faster, more accurately. Save time and money.

* any size

Make your reproductions larger, smaller or same size. Include illustrations, headings, etc., too. Many forms of office and commercial reproduction.

* fast and easy

Save time and expense of type setting. Your typewriter is your compositor. Each line typed on individual card. Only lines affected need be changed.

* in your office

Always under your control and available for reference or use. Compactly filed. Protective envelopes keep them clean. Send for complete information today.

ACME VISIBLE

Acme Visible Records, Inc.
CROZET, VIRGINIA
Representatives in all principal cities

pally operated power plants are used toward getting power lines underground. Since 1935, Winnetka has spent about \$40,000 a year for this program. That is, until recently. "For the next few years this program must be again curtailed because of the excessive cost of underground conductors at this time," C. R. Miller, village manager, stated recently.

In Belmont, the program is continuing, partly with the aid of new subdivision developers who ante up an extra per house assessment in order to pay for underground conduits and cables.

Next to getting the lines underground one of the most frequently suggested solutions for power interruptions due to storms is an emergency generator in every house.

"It wouldn't be a bad idea—if every home had a resident electrical engineer," one utility executive commented. "In the first place the home electric generator you see advertised as 'war surplus' has barely enough power to heat up two electric irons. In order to have enough power to run an electric range you'd need a fairly hefty \$3,000 to \$4,000 home generator.

"Then you need a permit to store gasoline and a special exhaust for fumes. And the wire from the generator must terminate at a double-throw switch so that the house can be energized from one source only. If it isn't properly wired the power can feed back into the main line and kill people.

"Then to top it all, unless the generator is kept in ready condition—by being given a trial run once a week—the chances are it won't work properly when you really need it. Also, they're awfully noisy."

If underground lines are too expensive and home generators too impractical is there *anything* that can be done to reduce the storm-caused outages of electric power?

There is one drastic method that would reduce storm and wind-caused outages but it would bring on a storm of outraged opinion even to suggest it.

Some 90 per cent of broken power wires are snapped by falling tree limbs. But obviously we're not prepared to cut down our big sidewalk trees. So the utilities have been spending huge sums of money on elaborate tree-trimming programs in cooperation with home owners and local shade tree committees. The trimming is done by expert tree men who are paid by the utilities. "Danger timber"—dead, dying or unsound trees or limbs—is removed promptly if it's likely to fall on a power line. In New Jersey alone the

five leading public utilities spent more than \$1,000,000 in 1952 on tree-trimming programs.

Helping to make the tree-trimming programs even more effective is the increasing use of aerial cable for ordinary overhead distribution wires. Because of its much greater strength the thicker cable withstands falling tree branches to a far greater extent than does ordinary open wire. It costs about 2½ times what ordinary wire does but it has another drawback. The cables still develop hard-to-find faults and really big falling limbs can snap them, too.

Under the heading of preventive therapy, many power companies have gone in heavily for improved chemical treatment of poles to make them last longer; for better guying of poles so that they stand up firmer under sudden impacts; for two-way radio systems between repair trucks and the main office; for new kinds of wire splices so that they pull apart less often; for wider spacing on pole crossarms so that wires are further apart and less likely to swing together in a high wind and burn. Other technical improvements include higher strength line wire, transformers with built-in lightning arresters and alternate means of feeding power to the same area in case of an outage.

In most parts of the country utilities have formed mutual assistance groups. If a bad storm hits New Jersey, line crews can be called in from unaffected parts of the country such as New England, the Midwest or upstate New York. The crews are flown in so that they have a night's sleep while awaiting the trucks being driven in. They help make it possible to restore service usually within days instead of weeks.

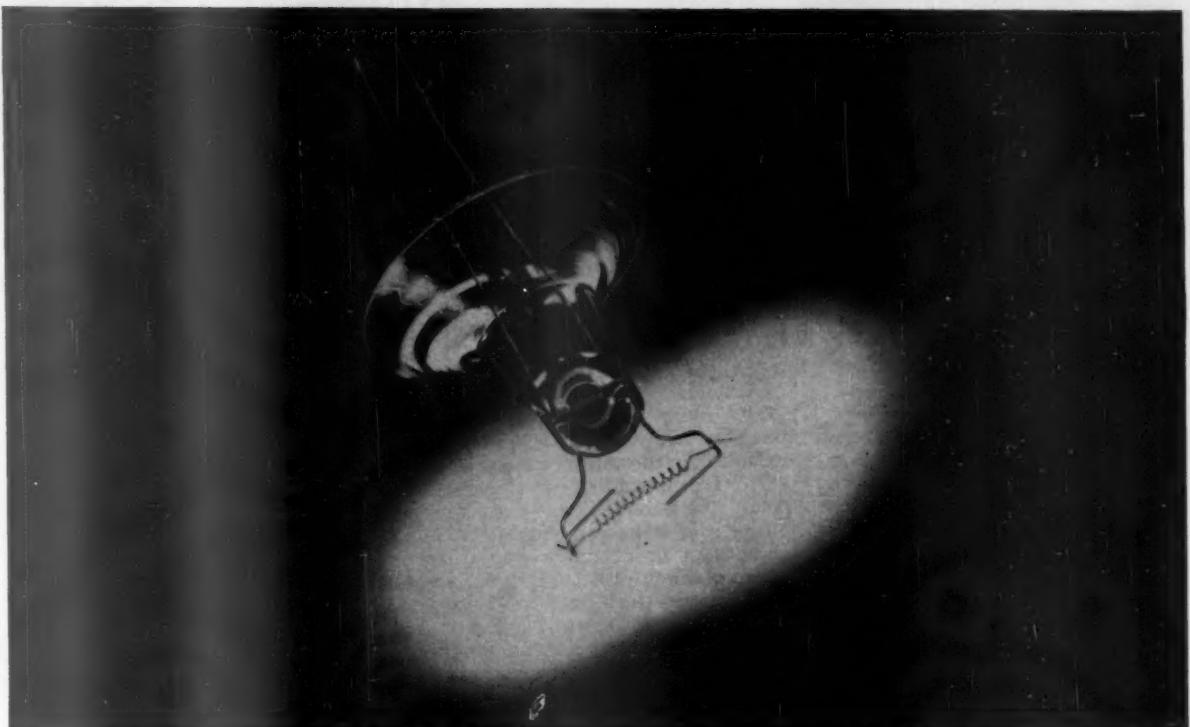
Yet in spite of these technical improvements we will still have severe storms and there will be periods when areas will be without electricity.

If it's any consolation you can remember that in the United States we have the best power service of any country on earth. Or, if you want to look ahead, the chances are that if it is ever developed to practical levels, wireless transmission of power will probably get its first tryout in the United States. So far it's only a laboratory curiosity.

But until that happy day we'll just have to learn to live with our power companies and their meteorological troubles just as they are patiently learning to live with the wire-snapping trees. That is, unless we suddenly find \$20,000,000 we don't know what to do with. Then the power companies will be very happy to get the lines underground. **END**

WESTINGHOUSE FLUORESCENT LAMPS

Last Over 7500 Hours..do yours?



Coils of tungsten wire, precision mounted like the one above, packed with an electronic mix, breathe life into your fluorescent lamps. The purer the tungsten; the fuller the packing; the longer your fluorescent lamps will last.

To assure an average life of over 7500 hours, Westinghouse processes its own tungsten and chemicals from raw

ore to final electrode. You can't foretell the life of a standard fluorescent lamp by looking at it. But with a Westinghouse label, you can be sure of an average life of more than 7500 hours.

For details, contact your Westinghouse Lamp Supplier, or write to Westinghouse Lamp Division, Bloomfield, N. J.



YOU CAN BE SURE...IF IT'S

Westinghouse

Tune in each week on TV... Westinghouse Studio One

RAIN MAKING becomes a science... and a PROBLEM

*A Presidential committee
is investigating the necessity for
regulating weather control efforts*

By RAY MITTEN

NEXT month a special Presidential committee will tackle the complicated job of determining how the nation's economy can obtain the greatest possible benefit from rain making.

Although its history tends to relate it to Indian tribe rituals and shady practitioners with the ethics of carnival medicine men, rain making today is legitimate business. Its operational dimensions are not officially known.

The difference between past and present is that today the ability to induce rain artificially under favorable conditions is a scientifically proven fact and professional meteorologists have replaced the fakers of yesteryear.

Today's rain-making business, which is in the \$1,000,000 class, dates only to 1946, when a General Electric Company scientist first triggered a likely cloud over Massachusetts by peppering it with dry ice from an airplane. One of his colleagues subsequently discovered that silver iodide also would induce moisture-filled but reluctant clouds to make rain.

Those revelations brought a large and growing—but still officially uncounted—number of commercial rain makers into the field. One of them alone was known a couple of years ago to have 300,000,000 acres of land under contract—about 12

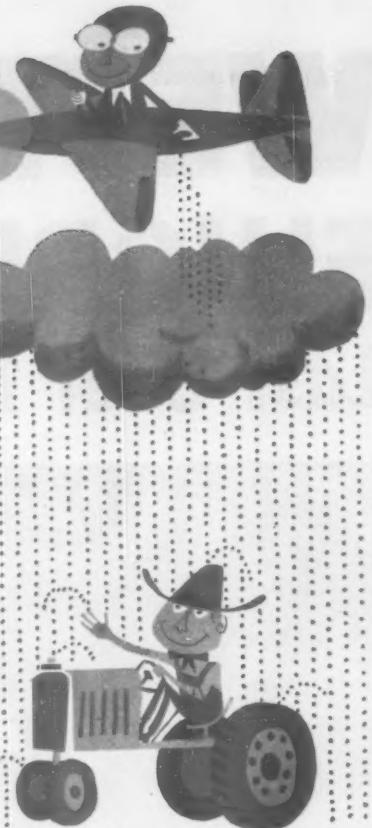
times as many acres as are under irrigation in the entire country.

In recommending the federal study, the Senate Commerce Committee said last summer that "associations of farmers are sponsoring many of these projects but private corporations—including public utility companies, sugar and fruit-growing companies, and an aluminum company—are sponsoring a substantial number of them in this and other countries."

It noted that large-scale experiments are being carried on in Canada, Peru, Cuba, Japan, Formosa, India, Australia, Scandinavia, Turkey, Egypt, Arabia and other countries.

Senate testimony had linked rain making to industrial water needs. The Bureau of Reclamation estimated at 42,000,000,000 gallons a year the water needs at the peak of any near-future war for all industrial operations, steam for electric power, and railroads. That is about 20 per cent more than is used for all purposes today. The Commerce Department noted, for example, that it takes about 23 gallons of water to refine one gallon of gasoline, 36 gallons to make a pound of steel, ten to 14 to refine a pound of sugar, and 47 per pound of finished textile product.

"If practical," the Senate committee report stated, "weather control



promises tremendous benefits for a small investment. Research work in the field involves no test plants or production facilities and very little expensive equipment. The seeding agents, carbon dioxide or silver iodide, are inexpensive, yet when used in small quantities they apparently produce weather phenomena of the highest magnitude.

"If these phenomena cause only a small increase in precipitation, this small increase can be economically important. An inch of extra rain, converted into runoff and concentrated in a reservoir, can produce electric power worth hundreds of thousands of dollars. A fraction of an inch of extra rain, falling on crops during the period of germination, can greatly increase crop yields.

"But artificial nucleation may have useful potentialities in addition to that of stimulating rainfall," the report observed. "It may have possibilities for increasing snowpack in mountainous areas, for holding back and 'softening' rainstorms, thereby reducing soil erosion, for inhibiting hail, for breaking up hurricanes and for precipitating out and thereby cutting holes in clouds so that aircraft can operate."

The committee report said two important questions remain unanswered.

The first is: "How often do the

THE Nation's Business

...THE WEEKLY RADIO PROGRAM THAT MAKES
BUSINESS EVERYBODY'S BUSINESS



Fairbanks-Morse has long felt that an information-type radio program, broadcast nationally, was needed now as never before. With the cooperation of the editors of NATION'S BUSINESS, we now bring you every week a summary of the latest news—important to everybody's business.

Gathered from the most reliable local, national and international sources, these are facts upon which you can base your private judgment and act in an informed way. Such is the program Nation's Business. Fairbanks, Morse & Co., 600 South Michigan Ave., Chicago 5, Ill.

Be Sure You Tune in This Week!

City	Station	KC	P.M. Time and Day
Atlanta, Ga.	WSB	730	7:15 Mon.
Baltimore, Md.	WBAL	1090	7:15 Mon.
Beloit, Wis.	WGEZ	1490	7:45 Mon.
Birmingham, Ala.	WBRC	960	6:15 Mon.
Boston, Mass.	WBZ	1030	8:00 Tues.
Buffalo, N.Y.	WBEN	930	7:00 Tues.
Charlotte, N.C.	WBT	1110	7:30 Mon.
Chicago, Ill.	WGN	720	8:05 Mon.
Cincinnati, Ohio	WLW	700	10:15 Mon.
Cleveland, Ohio	WGAR	1220	7:30 Mon.
Columbus, Ohio	WHKC	610	6:45 Mon.
Dallas, Texas	KRLD	1080	6:30 Mon.
Des Moines, Iowa	WOC	1420	6:15 Mon.
Denver, Colo.	KOA	850	8:30 Mon.
Des Moines, Iowa	WHO	1040	7:15 Tues.
Detroit, Mich.	WWJ	950	6:45 Mon.
Duluth, Minn.	WDSM	710	8:15 Mon.
Freeport, Ill.	WFRL	1570	4:15 Mon.
Houston, Tex.	KXYZ	1320	7:00 Tues.
Indianapolis, Ind.	WFBM	1260	6:15 Mon.
Jacksonville, Fla.	WJAX	930	7:15 Mon.
Kansas City, Mo.	WDAF	610	6:15 Mon.
Knoxville, Tenn.	WNOX	990	6:30 Tues.
Los Angeles, Calif.	KFI	640	7:45 Mon.
Louisville, Ky.	WHAS	840	6:30 Mon.
Memphis, Tenn.	WMPS	680	6:30 Mon.
Milwaukee, Wis.	WCAN	1250	7:15 Mon.
New Orleans, La.	WWL	870	6:30 Mon.
Omaha, Nebr.	KFAB	1110	6:30 Mon.
Philadelphia, Pa.	WCAU	1210	7:30 Mon.
Pittsburgh, Pa.	KDKA	1020	6:30 Tues.
Pomona, Calif.	KPMO	1600	6:15 Mon.
Portland, Oregon	KGW	620	6:45 Mon.
Providence, R.I.	WPRO	630	6:30 Mon.
St. Johnsbury, Vt.	WTWN	1340	7:15 Mon.
St. Louis, Mo.	KSD	550	7:15 Tues.
St. Paul, Minn.	KSTP	1500	6:15 Mon.
Salt Lake City, Utah	KSL	1160	7:30 Tues.
San Francisco, Calif.	KGO	810	6:30 Mon.
Schweinfurt, Mass.	WRUL	9581	6:30 Mon.
Seattle, Wash.	KOMO	1000	6:45 Mon.
Stuttgart, Ark.	KWAK	1240	6:30 Mon.
Tulsa, Okla.	KVOO	1170	6:45 Mon.
Washington, D.C.	WMAL	630	8:15 Mon.

FAIRBANKS-MORSE

a name worth remembering when you want the best

DIESEL LOCOMOTIVES AND ENGINES • RAIL CARS AND RAILROAD EQUIPMENT • ELECTRICAL
MACHINERY • PUMPS • SCALES • WATER SERVICE EQUIPMENT • HAMMER MILLS • MAGNETOS



COULD YOU COLLECT?
When Accounts Receivable records are destroyed, 40% - 60% of accounts due are never collected. Accounts Receivable Insurance provides the only 100% protection against resulting financial loss.

WHEN YOU BUY INSURANCE BUY INTEGRITY

Insure with an Agent of...



HARTFORD 15, CONN.

The Connecticut Fire Insurance Company
Equitable Fire & Marine Insurance Co.
Minneapolis Fire & Marine Insurance Co.
The Central States Fire Insurance Co.
Atlantic Fire Insurance Company
Great Eastern Fire Insurance Company
Reliance Insurance Company of Canada

1854 CENTENNIAL 1954

proper conditions exist so that favorable seeding opportunities present themselves?"

This alludes to the fact that the dry ice or silver iodide particles serve as artificial nuclei around which the cloud's tiny water droplets form until they create rain drops heavy enough to fall through the up-drafts that keep clouds aloft. The cloud must be very cold and in a "naturally unstable" condition—one where it might drop its moisture without chemical stimulation.

The Senate committee's second question: "Will artificial nucleating agents make or increase rainfall in economically important quantities?"

Charged with answering those and related questions is the President's new Advisory Committee on Weather Control, authorized by Congress late last summer in a bill sponsored by Sen. Francis Case of South Dakota who has invested much of his own time and money in rain-making trials.

Aware of the complexity of its job, the new committee had hoped to get under way earlier.

Unfortunately for it, however, the President did not sign the bill into law until after Congress had adjourned last year, so there was no opportunity to seek a congressional appropriation for the work. The committee expects to get its money, something in the neighborhood of \$150,000, in April.

Meanwhile it has found air conditioned office space in one of the new government buildings in Washington, scrounged some furniture and is limping along with personnel that has been borrowed from government bureaus.

Chairman of the committee is Howard T. Orville, a retired Navy captain who now is a technical consultant at the Friez Instrument Division of the Bendix Aviation Corporation in Baltimore. While in the Navy he was associated with "Project Cirrus," which the Defense Department undertook in cooperation with General Electric in 1947 to explore the possibilities of rain making.

The other four public members are Lewis W. Douglas, former ambassador to Great Britain, who is greatly interested in cloud physics; A. M. Eberle, dean of agriculture at South Dakota State College of Agriculture and Mechanic Arts; Joseph J. George, a former Air Force general who is now superintendent of meteorology for Eastern Air Lines at Atlanta; and Kenneth C. Spengler, executive secretary of the American Meteorological Society in Boston.

Government agencies represented are Defense, Interior, Agriculture, Commerce, the National Science

Foundation, and the Department of Health, Education, and Welfare.

While the ultimate purpose of the committee is to determine the economic potentialities of rain making, its first assignment is to tell the President whether he should advise Congress to require the licensing and regulation of cloud milkers. It is to do this "at the earliest possible moment," the law stipulates.

The statute contains a dire warning about the possible harmful effects of unregulated or, at least, unreported rain making.

This, it says, "may cause catastrophic droughts, storms, floods and other phenomena with consequent loss of life and property, injury to navigable streams and other channels of interstate and foreign commerce, injury to water supplies for municipal, irrigation, and industrial purposes, and injury to sources of hydroelectric power." It may also, the law says, "otherwise impede the production and transportation of goods and services for domestic consumption and export and for national defense; and may otherwise adversely affect the general welfare and common defense."

As a matter of fact, congressional



interest in rain making was greatly stimulated by the tragic Kansas floods of 1951. There were those members, especially some from the area affected, who suspected that the floods were aided and abetted by rain-making operations farther west.

They, of course, could not be sure—and it was that very uncertainty that put impetus behind the legislation. The fact is that the commonly used silver iodide, pumped into the air from ground generators, is odorless and colorless and rides the winds. The idea is to locate generators strategically so that prevailing winds will carry the chemical into the clouds whose rain is desired.

But winds may shift suddenly—and no one is positive how long silver iodide retains its rain-making properties after being exposed to sunlight and atmospheric conditions. However, a few years ago G.E.'s Dr. Irving Langmuir, Nobel Prize winner and rain-making pioneer, conducted experiments with silver iodide in New Mexico which, he proved to his



INSERTING & MAILING MACHINE

When Inserting & Mailing Machine takes over mailing preparation—it's important news for mass mailers. Just consider! This machine performs seven intricate operations. It inserts up to eight enclosures in the envelope; moistens flap and seals envelope; meters postage or prints indicia; counts the total mailing and stacks. One operator replaces scores of clerks and you make decisive savings every time you make a mailing. Many large mailers have reduced costs by as much as 80%.

Mechanized mailings go out faster — up to 40,000 pieces can be ready for Uncle Sam's trucks in an eight-hour work day. They are cleaner and more accurate too, because mechanical fingers don't get

tired, don't make errors and stay spotless.

See *Inserting & Mailing Machine in Action* . . . A demonstration can be arranged in your City at your convenience. Or, our illustrated folder, *Reducing Mailing Costs by 80%*, will tell you more about the machine. Just use the coupon.

INSERTING AND MAILING MACHINE CO.,
PHILLIPSBURG, NEW JERSEY

We would like to test the economy of the *Inserting & Mailing Machine Method*.
 Please send booklet describing new machine, *Reducing Mailing Costs by 80%*.

Individual _____

Firm _____

Address _____

City _____ Zone _____ State _____

INSERTING AND MAILING MACHINE CO.
PHILLIPSBURG, NEW JERSEY

GATHERS ENCLOSURES

INSERTS INTO ENVELOPE

SEALS ENVELOPE

PRINTS POSTAGE INDICIA

COUNTS & STACKS

How to get

the cash your company needs in 1954—to pay taxes or meet payrolls, for plant modernization, to carry larger receivables, etc. . . ? Simple! COMMERCIAL CREDIT's method can provide

from \$25,000

to millions of dollars—without diluting ownership, without mortgaging future profits, without hampering company operation. Some individual companies in this way used during 1953 up

to 5 million

dollars of COMMERCIAL CREDIT's money. COMMERCIAL CREDIT in 1953 advanced more than 600 million dollars for working capital purposes alone. In most cases, cash was forthcoming

within days

of first contact. COMMERCIAL CREDIT's method is efficient and economical. It lets you increase or decrease the amounts of cash used at any time—lets you use it just

for months

or as long as there's need. COMMERCIAL CREDIT funds are available on a continuing basis. The single reasonable charge is a tax deductible expense. To get cash for temporary needs

or for years

write, wire or phone the nearest COMMERCIAL CREDIT CORPORATION office listed here. Say, "Send me information about the plan offered in *Nation's Business*."

BALTIMORE 1—200 W. Baltimore St. CHICAGO 6—222 W. Adams St.
LOS ANGELES 14—722 S. Spring St. NEW YORK 17—100 E. 42nd St.
SAN FRANCISCO 6—112 Pine St.

A Service Available Through Subsidiaries of

COMMERCIAL CREDIT COMPANY

Capital and Surplus Over \$145,000,000

satisfaction with Weather Bureau records, affected rainfall patterns in eastern states.

"Our first job is to find out who is doing what—under what conditions and with what results," says Chas. Gardner, Jr., who dislikes having his first name spelled out, works for Senator Case, and is slated to become executive secretary of the Weather Control Committee. He is aware from experience of the magnitude of the committee's job. Having come with Senator Case when the latter switched from House to Senate in 1951, Mr. Gardner formerly was executive secretary of the South Dakota Natural Resources Commission. In that capacity he delved deeply into the physical and commercial intricacies of rain making and made some recommendations to the state legislature. Subsequently the legislature passed a law requiring licensing of rain makers.

The new committee's first action will be to compile a list of active commercial rain makers; there is no official one. The larger operators, such as Dr. Irving P. Krick of Denver, Dr. Wallace E. Howell of Cambridge, Mass., and Robert Elliott of Santa Barbara, Calif., who have big contracts here and abroad, are well known. But there are unlisted scores of smaller operators who work with a few ground generators or an airplane and a few buckets of dry ice.

All together their contracts cover millions of acres, mainly in the West, and they charge up to 15 cents an acre. The fee for grassland usually is from one half to one cent an acre; from five to 15 cents for cultivated land. The majority of their contracts are with groups of farmers, livestock growers and irrigation districts. Some agreements stipulate no payment unless positive results are shown.

The professional ranks, whatever their number, are supplemented by an unknown legion of do-it-yourself rain makers, who do not want to pay a practitioner but are willing to invest in an inexpensive, easy-to-use silver iodide generator. Such operations may well turn out to be the ultimate cause for recommending licensing or registration of all rain makers, with regular operational reports to the Weather Bureau. A lone rain-seeking farmer or rancher pumping invisible silver iodide into the air haphazardly may spoil a nearby well regulated operation and do damage, either by overseeding and preventing rain or causing excessive rain.

More immediate problems for the committee, however, are how to get the right kind of data for evaluation from commercial operators and,

5,300 INDEPENDENT TELEPHONE COMPANIES

...A GROWING
NATION-WIDE INDUSTRY

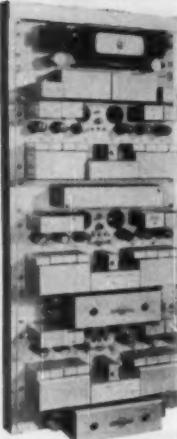
...and a growing outlet
for **IT&T** engineering
and manufacturing
facilities.



Typical of advanced design and performance in dial telephone switching systems is Kellogg Crossbar, developed by Kellogg Switchboard and Supply Company, a division of IT&T, for use in telephone exchanges. Together with Kellogg Relaymatic, as well as Step-by-Step and Rotary dial switching equipment made by Federal Telephone and Radio Company, also a division of IT&T, Kellogg provides a complete range of automatic switching systems as well as other equipment and supplies for the independent telephone industry.



Greater capacity for existing telephone lines is made possible by the compact and economical "carrier" system of telephone communications. Carrier can provide as many as 18 additional circuits, superimposed on existing lines without the necessity of stringing more wires. Short, medium and long-range types for voice as well as signal transmission are available. With the Kellogg Type No. 5 Carrier, shown at right, four simultaneous conversations may be carried on one wire circuit.



Microwave radio relay carries telephone circuits over mountains, rivers, deserts, lakes and other difficult terrain *without wire lines*. Between Bartow and Tampa, Fla., the Peninsula Telephone Co. has installed the first independent telephone company microwave link connecting with the nation-wide inter-toll dialing system. The complete equipment was designed by Federal Telecommunication Laboratories, research division of IT&T at Nutley, N. J.

The same skill in manufacturing and research builds better performance into products for home, business and industry made by the manufacturing divisions of IT&T—a great American trademark.



INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION
67 Broad Street, New York 4, N. Y.

For information about telephone equipment and supplies, write Kellogg Switchboard and Supply Co., 70 W. Monroe St., Chicago 2, Ill.



IN RETAIL STORES: G-E Air Conditioning makes summer business JUMP, not slump. Retailers report from 15 to 100% increase in summer business after G-E Air Conditioning.



IN FACTORIES: G-E Air Conditioning reduces production errors and rejects... helps hold to closer tolerances... protects water-sensitive materials... attracts and helps hold employees.



IN OFFICES: G-E Air Conditioning reduces absenteeism, boosts morale... increases summer efficiency... eliminates disturbing street noises, annoying drafts, and dust because windows can be kept closed.

HOW TO COOL ON A BUDGET

Extra Savings on G-E Air Conditioners If You Act Now!

There's still time to cash in on G.E.'s annual "Savings-Season" offer.

G-E dealers are offering special reduced price... small down payments... delayed monthly payments as low as \$30... installation at your convenience. But you must act now!

Why is this offer made? It's more economical for G-E dealers to spread installation work over an entire year than to work overtime during summer. They save—and so do you.

Don't forget, it's easy to fit G-E Air Conditioning into your budget. You can install a G-E Packaged Air Conditioner first where you need it most... showroom... conference room... laboratory... machine shop. Then, later, you can air condition other areas as needed by adding new packaged units.

Retail store... factory... office... it makes no difference. There's a G-E unit designed to fit every business, regardless of type or size. Why not take advantage of the extra savings during the big G-E "Savings-Season" offer? Call your nearest G-E dealer today or mail coupon below.

Packaged
AIR CONDITIONERS
for Business and Industry
GENERAL ELECTRIC

General Electric Co., Sec. NB-3,
Air Conditioning Division, Bloomfield, N. J.

Please make a free investment analysis of air conditioning for my business

Send free booklet on G-E Air Conditioning

Name.....

Company.....

Address.....

City..... State.....

more difficult, how to establish effective criteria for evaluation.

The committee expects help on the latter from months of experiments with dispersing silver iodide from an airplane in Washington State, which the Weather Bureau will conclude for the Defense Department in April or May. The department, which has been spending about \$1,000,000 a year on rain-making research, is more interested in the physical phenomena involved than in any military applications, although the latter are admittedly possible.

A few years ago during a Defense Department experiment in New Mexico an airplane sowing dry ice finally managed to tease a weak shower out of a small cloud. A proud Navy officer involved turned to an Indian who was among the onlookers and asked him how he liked this achievement.

The Indian replied matter-of-factly, "We've been doing it for years."

Indian rain-making rituals of the past included smoking special pipes,

"Just as man cannot live by bread alone, industry should not exist for profit alone; it should constantly ask itself whether its actions and policies are serving the general welfare and safeguarding the liberty and dignity of the individual."—Clifford F. Hood

burning tobacco in gross lots, shooting arrows at clouds, praying, dancing and chanting. The Choctaws hung a fish around a tribesman's neck and stood him in the nearest stream until it rained or, in unusually dry spells, for at least two weeks until a plausible official explanation for the continuing drought was evolved. They also tried to stop rain by roasting river bank sand.

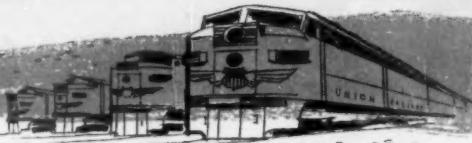
One of this country's earliest rain-making treatises was James P. Epsy's "Philosophy of Storms," published in 1841, which advocated the use of huge fires. On a more ambitious scale he later proposed burning a 40 acre timber tract each seventh day, the fires to be 20 miles apart along a 600 mile north-to-south line on our western border; this was never done.

The fire theory had its critics. R. De C. Ward wrote in *The American Meteorological Journal* in 1892 that it was commonly but erroneously supposed for years that the great 1871 Chicago fire was extinguished by the rain it caused. Actually, he said, no rain fell during

with Faith
and Confidence
in the future



**\$35,769,410⁰⁰ is being spent
this year for 205 new diesel
locomotives**



Union Pacific demonstrates its firm belief in our nation's progress by continuing its broad program of constant improvement in freight and passenger service.

Of these 205 new diesel locomotive units, 190 will be for freight, and 15 for passenger service.

Delivery is expected to be completed by June 1, 1954, completely diesel-

izing the railroad's main line between Omaha and the Pacific Coast, for handling of through traffic. Thus, the progressive Union Pacific maintains its tradition of serving all the West with the most modern equipment.

The expenditure of over thirty-five million dollars for these additional diesel locomotives will help maintain payrolls and the buying power so vital to our country's economic welfare.

* * *

*For Dependable Transportation
Be Specific . . . say*

UNION PACIFIC

Revolutionary  chain drive

opens up a new age of power transmission for industry



Borg-Warner
engineering
eliminates

"chordal
action"

—makes possible higher speeds
—saves space and weight

"Chordal action" has long been a bugaboo in chain drives for power transmission. The cause of pounding, bouncing, jerking and vibration, chordal action greatly limits the speed, load carrying capacity and service life of the drive.

To overcome these limitations, Borg-Warner's Morse Chain Division has developed a revolutionary drive that practically eliminates chordal action. Smooth as a belt, with the strength of steel . . . positive as a gear, with the flexibility of a chain . . . the HY-VO Drive can run at speeds up to 3600 rpm, linear velocities up to 6500 fpm, and can transmit up to 5000 hp.

Narrow, yet super strong, the Morse HY-VO Drive makes possible substantial savings in space—not only in over-all size, but especially in width. In many instances this completely eliminates the need for bulky, expensive outboard bearings and mountings.

With many additional features, the HY-VO Drive runs almost noiselessly, cuts operating and maintenance costs, lasts longer than conventional drives.

Contributions such as this to American industry are continuing evidence of the "design it better—make it better" policy applied to every Borg-Warner product. Proof again that—

B-W ENGINEERING MAKES IT WORK B-W PRODUCTION MAKES IT AVAILABLE

185 products in all are made by

BORG-WARNER



THESE UNITS FORM BORG-WARNER, Executive Offices, Chicago: ATKINS SAW BORG & BECK • BORG-WARNER INTERNATIONAL • BORG-WARNER SERVICE PARTS • CALUMET STEEL CLEVELAND COMMUTATOR • DETROIT GEAR • FRANKLIN STEEL • INGERSOLL PRODUCTS INGERSOLL STEEL • LONG MANUFACTURING • LONG MANUFACTURING CO., LTD. • MARBON MARVEL-SCHEELEER PRODUCTS • MECHANICS UNIVERSAL JOINT • MORSE CHAIN • MORSE CHAIN CO., LTD. • NORGE • NORGE HEAT • PESCO PRODUCTS • REFLECTAL • ROCKFORD CLUTCH • SPRING DIVISION WARNER AUTOMOTIVE PARTS • WARNER GEAR • WARNER GEAR CO., LTD. • WOOSTER DIVISION

the 24 hour fire, nor until four days later.

The champions of another favorite rain-making technique, percussion, found their authority in Plutarch, who once wrote that great battles usually are followed by rain. As late as the last century people were still trying to open clouds with cannons and dynamite. Congress put up \$9,000 in 1890 for some Agriculture Department experiments consisting of explosions both on the ground and, with the aid of gas balloons, in the air. Two years later the Department reported the experiments to be promising and Congress voted another \$10,000; but the promises wore thin and only half of the money was spent, with the rest returned to the Treasury.

In 1880, G. H. Bell of New York had proposed to a reluctant public a series of "discreetly located" hollow, 1,500 foot blower towers which would force saturated air into the heavens when rain was needed and, when less rain was desired, suck in clouds and hold them for future use.

A tower also figured in a 1916 San Diego episode that illustrates the ups and downs of rain making over the years. The city, after several years of drought, offered to pay Charles M. Hatfield \$10,000 if he could fill the lake behind Morena Dam, 60 miles southeast. He and his brother, Paul, built a 20 foot tower on a hill near the dam and started operations on New Year's Day, 1916, when observers saw smoke curl from the tower-top tank.

Mr. Hatfield had agreed to have four feet of water running over the dam by Jan. 27. As it turned out, 44 inches of rain fell in 26 days and Morena Lake rose 14 feet in one four-day period. Meanwhile, unknown to Mr. Hatfield, nearby lower Otay Dam was bulging and finally burst—on Jan. 27. Tons of water, lashed by high winds, tore through the valley, drowned several persons, caused millions of dollars in property damage and temporarily isolated San Diego from the rest of California. The Hatfields, according to San Diego *Evening Tribune* files, vanished while gun-toting farmers hunted them. San Diego faced \$6,000,000 worth of damage suits.

The experience understandably left San Diego shaken, but not enough so to close its mind forever to the possibilities of rain making. A couple of years ago the city signed a three-month contract for the seeding of 1,100 square miles with ground generators. The contractor reported a 60 per cent average increase in precipitation. His fee, reminiscent of the Hatfields, who never collected, was \$10,000.

END

Build prestige
with Dodge-
America's
smartest new
trucks



Smart "Town Panel" illustrates new Dodge styling, bright new trim.

New Dodge trucks give *eye-appeal* and *performance*!

In every way, they mean a better deal for the man at the wheel. Look at the features shown below. Then remember that Dodge offers the roomiest, most comfortable cabs yet built, with unmatched visibility, easy-chair seats, easy-to-reach controls.

Yet with all their extra value, Dodge "Job-Rated" trucks are priced with the lowest . . . save you plenty in operating and maintenance costs.

See or phone your friendly Dodge dealer; ask him for a demonstration. Five minutes behind the wheel will *prove* Dodge a better deal!

A better deal
for the man
at the wheel

with new

DODGE "Job-Rated" TRUCKS

See "Break The Bank" on TV (ABC, Sundays) • Hear "The Roy Rogers Show" on radio (NBC, Thursdays) • See "Make Room for Daddy" on TV (ABC, Tuesdays)



POWERFUL V-8's AND 6's,
with 100 to 172 h.p., top
efficiency and economy.



EASIER LOADING . . . pick-
up and panel body floors
less than 2 feet high.



SHARPEST TURNING trucks
of all, to save you backing,
and needless maneuvering.

At your fingertips...



The NEW EXECUTONE Intercom saves time, increases output!

Add up all the time that's lost by key personnel running back and forth for information. Add up the time wasted by switchboard "bottlenecks."

The NEW EXECUTONE turns this lost motion into productive working time with convenient, instant voice-to-voice contact.

Get "Inside" Calls off your Switchboard

With EXECUTONE you talk to any department as often as necessary... freeing your switchboard for "outside" calls. Voices are amazingly crisp and clear. Low cost Executone quickly pays for itself in dozens of ways. Get the whole story—no obligation!

Executone

COMMUNICATION AND
SOUND SYSTEMS

GET THE
FACTS

EXECUTONE, INC., Dept. C-2
415 Lexington Ave., New York 17, N. Y.
Without obligation, please send me data
on Executone for:

- INTER-OFFICE COMMUNICATION
- SWITCHBOARD RELIEF
- INTRA-PLANT COMMUNICATION
- LOCATING PERSONNEL

NAME _____ TITLE _____

FIRM _____

ADDRESS _____ CITY _____

In Canada—331 Bartlett Ave., Toronto

It's Better Business to Investigate First

(Continued from page 44)
work with legitimate business. For instance, during the first half of 1953 the national bureau alone eliminated 149 examples of objectionable advertising. The companies involved spend more than \$200,000,000 yearly on ads and include 13 of the nation's 100 leading advertisers. In nine out of ten cases the advertiser voluntarily made correction. Sometimes a phone call is enough. For instance, last fall a king-sized firm offered a "half-price" sale of rice. The morning the first ad appeared the BBB noticed that the customer had to buy a package at full price to get a second at half price.

It phoned the advertiser that day and the ad was immediately abandoned.

In contrast, two years of work were required to halt newspaper, magazine and radio advertising of a "bargain offer" of small tulip bulbs.



The first year the BBB had 1,000 bulbs planted, of which 360 grew leaves and none produced blooms. But the nursery disputed the fairness of the tests and the bureau really went to work. Sixteen local offices, from Boston to San Diego, from Montreal to Atlanta, purchased bulbs, turned them over to botanical gardens, park departments, agricultural colleges and other horticultural authorities. They planted 2,734 bulbs, found that 1,363 grew leaves and only 72 bloomed.

The nursery firm still refused to stop advertising, so the BBB pulled all the facts together in a bulletin for newspapers, magazines and radio stations. Shortly, the nursery firm discontinued the small-bulb campaign.

The BBB gives no preferential treatment to advertising by members.

Occasionally a trickster trips himself up by claiming he's been recommended by the BBB. It doesn't recommend or endorse any product, firm or individual. No member is

even permitted to advertise that he or his firm belongs.

Similarly, the bureaus do not endorse any fund-raising appeal. They dig up data about appeals, publish them and thereby help the public to determine factually which appeals to support. One item it tries to pin down is what part of the contribution the professional fund-raiser takes for himself. Many charities hold fund-raising costs down to five or ten cents out of each dollar contributed.

Anything over 20 cents would certainly be questioned. Yet the BBB occasionally has found promoters putting as much as 90 cents of each dollar into their own pockets. In many states a professional promoter can keep 95 cents out of your \$1 without violating the law. The standard pay for professional phone men hired by professional promoters is 25 cents out of each \$1 raised.

The BBB has steadily battled unordered merchandise promotions put on in the name of charity. It has exposed many—shown that the charity named actually was receiving none of the proceeds.

Out of 125,000,000 inquiries that poured into BBB offices last year 112,000 were about fund-raising appeals. That put fund-raising inquiries and complaints in first place for the third year in a row. Americans are now contributing some \$4,000,000,000 a year to charities and the phone solicitors have become such a problem that all bureaus are broadcasting tips on handling them. BBB offers the following advice in dealing with telephone solicitors.

1. *Say you never make contributions or buy tickets or advertising space in programs or special editions over the telephone.*

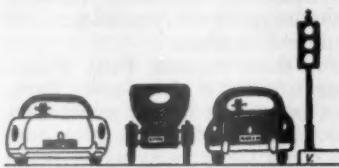
2. *Tell the caller to write you a letter stating all the facts so you can check with the BBB.*

3. *If a letter is received (the chances are 100 to 1 that you won't get one) then refer it to the BBB.*

Back in the early days the BBB received many more complaints than inquiries. That has been reversed. Now inquiries lead complaints three to one. This is partly a result of consumer education, partly of better business practices which business has forced upon itself. A wise slogan coined by the Cleveland bureau a third of a century ago advises: "Before You Invest, Investigate." The ratio of inquiries to complaints shows how well it has caught on. END

Toll Road Boom

(Continued from page 52)
through tolls is not equally obvious to many people. They point out that turnpikes were the vogue in this country and Europe 100 years ago, only to be abandoned; that modern toll roads are still too new to provide satisfactory answers to some important questions. Among these are: What does it profit to have 10,000 miles of superhighway when our road system actually includes 3,343,000 miles of roads; what happens to people and businesses not on superhighways; and why should a motor-



ist pay a toll—equal to a gas tax of 15 to 20 cents per gallon—in addition to an actual gas tax and a registration fee?

All of these questions make sense and serious students of highway problems are studying them. They have come up with some of the answers.

Almost the entire present-day toll road movement has taken place since the end of World War II. The Pennsylvania Turnpike opened in 1940 but seven years passed before the next toll highway, the 47 mile Maine Turnpike between Portsmouth and Portland came into being. In 1950 the Pennsylvania Turnpike sprouted another 101 miles to reach the New Jersey border, and both Florida and New Hampshire opened 15 mile toll routes.

In 1951 the 67 mile western extension of the Pennsylvania Turnpike was completed. Next year saw Colorado open the Denver-Boulder Turnpike and the New Jersey Turnpike begin operations. This superhighway has achieved the most spectacular popularity of any road in history and is perhaps mainly responsible for the remarkable change in attitude of many former enemies of toll financing. The Turner Turnpike between Tulsa and Oklahoma City opened last year, adding 88 more miles to the growing toll network.

Reasons given for this growth are usually three:

First, the increasing number of motor vehicles—54,700,000 of them.

Second, the unwillingness of state legislatures to increase state gas taxes, borrow money or concentrate



Making dream homes come true for thousands

Buying a home is the most important investment the average family makes in a lifetime. Since 1940, over 55,000 families have selected "custom" homes "mass produced" by National Homes Corporation, Lafayette, Indiana.

From a modest beginning, National Homes' two giant plants now turn out 90 complete houses a day. With 39 designs, National Homes, through the miracle of modern manufacturing methods, is bringing better homes within the

reach of every American family.

Since its founding, National Homes Corporation has relied on the U.S.F.&G. organization to supply the various bonding and insurance coverages essential to its growth and operation.

Whether you build homes or buy them; whether you sell products or services; no matter where you are or what you do, there are U.S.F.&G. coverages to meet your needs.



Over ten thousand agents . . . there's one in your community:
Consult him as you would your doctor or lawyer.



CASUALTY-FIRE
INSURANCE
FIDELITY-SURETY
BONDS

United States Fidelity & Guaranty Company, Baltimore 3, Md.
Fidelity Insurance Company of Canada, Toronto

Your office is People

You profit or lose by their work attitudes

Let's face it . . . your office staff is a sensitive group. Their reaction to their surroundings and equipment shows in their work.

And, when overcrowded offices or outdated furniture hamper their efficiency—you pay the bill!

Costly errors in correspondence, in filing, in careless handling of orders have been eliminated in many businesses by standardizing on Steelcase. They find this *complete family* of desks, chairs, files and service units increases work output up to 35%, provides up to 25% more usable floor space. The result is always the same . . . happier, more productive, more efficient office teams.

Ask your Steelcase dealer to tell you the details. He's listed under "Office Equipment" in the Yellow Pages of your phone book.

METAL OFFICE FURNITURE CO.
Grand Rapids • Michigan

Free Office Guide

The colorful FREE booklet "Tooling Up Your Office" is crammed with new modern office planning ideas. For your copy, simply attach your letterhead, mail to Dept. C.

STEELCASE
BUSINESS EQUIPMENT



expenditures on the major routes where it is most needed.

Traffic volume has doubled in 20 years but road and street improvement has not kept up. It has, in fact, lost ground. According to the American Association of State Highway Officials the backlog of needed work on highways was \$29,000,000,000 in 1949; \$32,000,000,000 in 1952; \$35,000,000,000 last year. Gasoline taxes, greatest single source of road revenues, contribute about half of all the states' highway funds. But the average tax is only 32 per cent higher than 20 years ago. Nine states have not increased the rate at all in that time. Three have not increased since 1929.

Frequently, too, state highway funds are spent where politics, rather than need, suggests.

For these reasons, Paul Troast, chairman of the New Jersey Turnpike, points out that it would have taken 35 to 50 years to have completed the Turnpike by conventional means as compared to the two years required under the Toll Authority which was free of political restrictions.

But, as one highway authority recently put it, "If state highway departments were given the same freedom as toll authorities, they would do approximately what the toll authorities are doing."

Third, the modern motorist's willingness — some say eagerness — to pay for the privilege of using a modern highway. This is demonstrated by the fact that the New Jersey Turnpike is carrying a traffic volume it was not expected to reach for 15 or 20 years while the Pennsylvania Turnpike is seven years ahead of schedule in paying off its bonds. A recent Gallup poll showed a two to one vote in favor of a continent-spanning system of toll roads.

Aside from convenience, turnpike travel brings real savings in cost of operating a vehicle. Where the new route cuts down gradients and curves, as on the Pennsylvania Turnpike, the savings to commercial vehicles are considerable, in spite of the toll. A heavy truck saves 16 gallons of fuel on the average by using the Turnpike between Carlisle and Irwin (149 miles), as well as something more than two and a half hours in time.

The start and stop in congested traffic can cost a trucker just as much as steep hills and curves. One interstate trucking company proved this by comparing the New Jersey Turnpike and the best available alternate route between a point in Delaware and the George Washington Bridge. The turnpike trip took 42 per cent less time, speed was 49 per cent

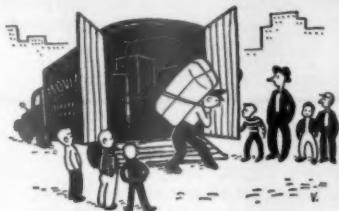
greater, fuel consumption was 11 per cent less, accident exposure only a ninth as great, and gear shifting was 85 per cent less frequent—meaning less driver fatigue and reduced wear on the truck.

Mr. Troast has estimated the savings for the 50,000,000 people who used the Jersey Turnpike last year:

"If we evaluated the savings at only a half hour in time and at only a dollar an hour, we would have there a saving of \$25,000,000—compared to about \$16,500,000 that these people paid in tolls."

For the Ohio Turnpike, the estimated time saving of three hours and 23 minutes for automobiles will more than pay for the toll charge of \$1.50 if the nominal figure of 60 cents an hour is used for the value of operating an automobile.

The users are getting an extra dividend in safety from the toll road movement, too. Engineered for safe traffic movement, the turnpikes show a considerably lower death and accident frequency rate when compared with old type roads. Last year traffic cost nearly 40,000 lives. On a rate basis, figuring deaths per 100,000,000 vehicle miles, the trend has been down a little, but the rural decline has been just half of what has been



accomplished in urban areas. So the lower accident rates of the rural toll roads are a welcome benefit.

The New Jersey Turnpike experienced a fatality rate of only 4.14 last year—far below the nationwide rate of 6.7.

Turnpike engineers, however, intend to improve on that and a new idea will soon be tested which may help prevent deaths now attributable to "highway hypnosis," a deadly state that comes from driving at a constant speed for a long time. This condition renders a driver incapable of acting quickly in sudden traffic emergencies. The stop-go movement of older type roads has one advantage, at least: It keeps the driver mentally on his toes.

The new idea, which will be built into New Jersey's new Garden State Parkway, involves stopping all traffic at ten to 15 mile intervals at toll booths where, besides paying a little time, the driver has to go through the motions of stopping and starting his car. This may de-hypnotize him.

SAVE 50% on Roof repairs

with TROPICAL'S new maintenance
system for industrial,
commercial buildings



FREE BOOK shows how 90%
of leaky roofs can be Saved; cut
costs in half with unskilled labor!

You can save a great deal of money in roof repairs by sending for this free book "Saving Old Roofs." Roofing men of long experience

wrote it. They have been responsible for the formulation of improved roofing materials and developing modern reconditioning methods.

It shows there are no "trade secrets" to good roof repair. By following this simple step-by-step manual, your own labor force does first-class repair work on any type of industrial roof. It shows how leaky roofs can be given added years of weather-tight life, saving the high cost of a new roof. It covers every detail of repair.

Even if complete roof renewal is necessary, it shows how your own employes or men without experience can do a fine job at great savings with Tropical's Cold Process Roofing!

GET YOUR COPY NOW! Sent only to owners or managers of industrial or commercial buildings, "Saving Old Roofs" is FREE upon your business letterhead request. Write today!

THE TROPICAL PAINT & OIL CO., 1134-1286 W. 70th St., Cleveland 2, Ohio

Heavy-Duty Maintenance Paints Since 1883



HOW
TO

IDENTIFY A GREAT DESK BUY



You don't have to be an expert to judge desk value. Just see if the symbol "ID" appears in the middle drawer. If so, you'll know it's an Indiana Desk — and a great buy by any value standard. Because every Indiana Desk is a product of extra-good wood and expert craftsmanship . . . planned to promote most effortless user efficiency. And "ID" spells "budget-sparing," too!



A visit with your nearest Indiana Desk dealer will prove profitable indeed. Please write us for his name, now.

indiana desk co.
JASPER, INDIANA - U.S.A.

NOW! 2 to 5 station TELEPHONE INTERCOM

DIRECT-A-CALL

For small offices or direct "keyman" hook-ups in large firms . . . Every phone is a master station — you can call every other station with direct-signalling pushbuttons . . . Quiet, efficient intercom—no noisy "broadcasting" . . . No batteries or tubes . . . Install it easily yourself with a screwdriver . . . Handsome, compact phones of unbreakable grey plastic . . . Mount on top or side of desk . . . Power supply plug into 110 volt outlet.

Complete 5-station system \$157
(Smaller systems lower priced)

Call your local dealer or write us direct:

Connecticut
TELEPHONE & ELECTRIC CORP.
88 Britannia St., Meriden, Conn.

Send information about Direct-A-Call to:

Name _____
Firm _____
Address _____

tize him enough to reduce the fatality toll still further.

H. W. Giffin, chief engineer of the New Jersey Highway Authority now building this 185 mile turnpike, cites some further advantages: Turnpike personnel will have a chance at each barrier to advise drivers of adverse weather or traffic conditions ahead. Also, he adds, this system uses less right-of-way so construction costs are less.

While all of this adds up to a pretty picture for those who want to use the turnpikes, studies are beginning to show some corollary benefits for those who travel the 3,000,000-plus miles of free streets and highways.

J. Wiley Richardson, head of the Oklahoma Turnpike Authority, puts these benefits into an epigram:

"The toll road," he says, "is the mother of an adequate highway system."

Less picturesquely, the toll road, because it is located where traffic relief is most urgently needed, has a far greater effect on the total traffic picture than highway mileage figures would indicate. It also helps other roads, not only by releasing funds that state highway departments would otherwise use on main-line routes but by generating more state revenues. Because toll roads gen-

erate much of their own traffic, gasoline tax receipts increase. During the expected life of the New Jersey Turnpike Authority, for example, the state will reap about \$1,000,000 a year from taxes on gasoline used on the turnpike.

All this, as a representative of the National Grange recently pointed out, adds up to more money for farm-to-market roads—and the farmers like it.

Even the effect on paralleling free roads, subject of dire predictions in the early days of the toll road revival, seems to be less than anticipated.

Restaurants, filling stations and other businesses on parallel routes suffer somewhat at first. When the New Jersey Turnpike opened, traffic on the parallel routes immediately fell off as much as 50 per cent at some locations.

Peter Sadaras who is manager of a Howard Johnson's restaurant on U.S. Route No. 1 near Woodbridge, N. J., reported a 20 per cent drop in his business on this account. But since then, traffic has built back up materially on the parallel routes and Mr. Sadaras has regained five per cent of the loss. Experience has shown that the subtraction of through traffic almost always benefits the by-passed district even though a

Take the combined good will of all the American people—put this good will into one vast stockpile of human kindness—make it available to help instantly and with understanding those in need in time of emergency—and you have one of our foremost national institutions, the American National Red Cross.

We are blessed that there is such an institution as the Red Cross, growing out of the generous, unselfish spirit of our citizens. It is one of the makers of our country's greatness—and a vast force for good in the world.

During the coming year, the American Red Cross will carry on, and expand, the work which it has always done so effectively—such things as:

1. Aiding families in time of disaster. (Last year, more than 24,500 families were helped at a cost of about \$5,500,000.)

2. Helping servicemen and their families. (Last year, the Red Cross

spent about 40 per cent of its budget—more than \$36,000,000—for help and services to veterans and to the men and women in the armed forces.)

3. Conducting training courses in first aid and in water safety to cut down fatalities from accidents. (Since 1910, the Red Cross has awarded more than 25,000,000 certificates to individuals successfully completing their first aid and safety courses. This work is continuous.)

4. Collecting blood from donors and distributing blood and blood products to civilian, veterans and military hospitals for use in treating disease and injury—and for use in fighting against the crippling effects of polio. (For the coming year, the Red Cross will be called upon for more than 3,000,000 pints of blood.)

Richard L. Bowditch, President
Chamber of Commerce of the
United States

For **LOW-COST DEPENDABLE** steam, **UPJOHN** burns **COAL** the modern way!



The firing aisle of Upjohn's ultramodern steam plant.

This plant supplies steam, cleanly and efficiently, at only 40¢ to 42¢ per 1,000 lbs. for the Portage Road Plant near Kalamazoo, Michigan. There are

no dust or smoke nuisances, thanks to the dust-collecting and cinder re-injection system. Ash handling is fully automatic. These 3 boilers, plus a fourth recently installed (not illustrated), deliver up to 115,000 lbs. steam per hour at peak load.

Whether you're building a new plant or modernizing an older one, you can count on coal for dependability and low-cost operation.

Here's why: Up-to-date coal-burning equipment can give you 10% to 40% more steam per dollar. Automatic coal- and ash-handling systems can cut your labor cost to a minimum. Let a consulting engineer show you how a modern coal installation, tailored for your specific needs, can save you real money.

Here's something else, too—of all fuels, coal alone has virtually inexhaustible resources. This, plus the fact that America's highly mechanized coal industry is the most efficient in the world, assures you of a dependable supply of coal at relatively stable prices now and for years to come.

Upjohn's new pharmaceutical plant which includes units for production of penicillin and cortisone, as well as some 700 other pharmaceutical products, relies on coal for dependable steam!

If you operate a steam plant, you can't afford to ignore these facts!

- COAL** in most places is today's lowest-cost fuel.
- COAL** resources in America are adequate for all needs—for hundreds of years to come.
- COAL** production in the U.S.A. is highly mechanized and by far the most efficient in the world.
- COAL** prices will therefore remain the most stable of all fuels.
- COAL** is the safest fuel to store and use.
- COAL** is the fuel that industry counts on more and more—for with modern combustion and handling equipment, the inherent advantages of well-prepared coal net even bigger savings.

BITUMINOUS COAL INSTITUTE

A Department of National Coal Association, Washington, D. C.

FOR HIGH EFFICIENCY & FOR LOW COST
YOU CAN COUNT ON COAL!

American Credit Insurance

Keeps Credit Costs Primary!

1. Helps avoid secondary credit costs.
2. Protects working capital invested in Receivables.
3. Provides endorsement for borrowing purposes.
4. Backs judgement of Credit Executive.
5. Gives positive loss prevention.
6. Harmonizes Credit-Sales relations.
7. Promotes efficiency in organization.
8. Creates confidence—basis of all credit.
9. Provides service for handling collections.
10. Minimizes risk and anxiety, promotes planning.
11. Endorses customer's promise to pay.
12. Gives Accounts Receivable real value.
13. Provides accurate cost basis of shipments.

For booklet, write Dept 41, First National Bank Building, Baltimore 2, Md.

**American Credit
Indemnity Company
of New York**

readjustment period may be involved.

The New Hampshire Turnpike immediately relieved U.S. Route 1 of half of its traffic. However, volume of both traffic and business has built back up to former levels. The same thing appears to have happened along the Maine Turnpike. New industries have been attracted to the Portland area as a result of the improved transportation.

Even paralleling railroads appear to feel no serious impact. Fred Capri, vice president in charge of traffic for the Pennsylvania Railroad, says that although the New Jersey Turnpike cost his road some passenger traffic it has caused no specific diversions of freight. He adds that he does not "consider the turnpike as contributing to our ability to regain any traffic lost to trucks."

Furthermore, he says, turnpikes offer subsidized competition because, unlike the railroads, they are able to issue securities exempt from federal income taxes and they pay no taxes on their right-of-way.

As for businesses on routes not directly competing with the toll roads, the benefits seem to be obvious.

Among authorized projects is Indiana's cross-state 157 mile turnpike, being financed by the sale of \$280,000,000 worth of revenue bonds. The Indiana State Chamber of Commerce terms it "more than just another road. It is a complete business."

They are looking beyond the immediate employment and spending during construction to the long range effects of the new turnpike as a means of popularizing northern Indiana's recreational advantages and business facilities.

Others see toll roads as a means of opening up industrial as well as recreational areas, permitting trucks to speed raw materials from their sources to the plants and factories and eventually to take the finished products to port cities and distribution centers.

Increased tourist travel is another toll road dividend. Oregon interviewed her visitors in out-of-state cars in 1952 and found that 1,000,000 automobiles entered the state and left \$121,000,000. Many states exceed this. New York State's annual income from out-of-state auto tourists exceeds \$1,000,000,000 and California's is only \$250,000,000 less. For the U. S. as a whole, motoring vacationists spend approximately \$14,000,000,000 each year, the National Association of Travel Organizations says.

In the face of these arguments in favor, only two things apparently can stop the spread of extra-fare

just
\$17 41
 a month

gives you that expert you couldn't find

Here is a simple answer to your search for an expert, all-around bookkeeper. It's a Burroughs Sensimatic. This automatic accounting machine is so easy to use . . . so fast on every accounting job . . . that your bookkeeper will have the time and the means to do expert work on all your records.

The secret of this unsurpassed versatility is the Sensimatic's exclusive sensing panel that accurately guides the machine through any combination of accounting operations. To change the job, just turn a knob.

It's also a built-in guarantee against obsolescence. When your system or requirements change, just change sensing panels, not the machine; it's as simple as that.

All the benefits of this superb accounting tool are yours for only \$17.41* a month!

Here is the way to find out definitely how quick, easy and economical it is to apply complete Sensimatic accounting to your business: just call your nearest Burroughs branch office or write to Burroughs Corporation, Detroit 32, Michigan.

*Using average depreciation rates

ONE
SENSIMATIC
 handles all
 these jobs

COST RECORDS • INVENTORY CONTROL
ACCOUNTS RECEIVABLE • ACCOUNTS PAYABLE
GOVERNMENTAL REPORTS • PAYROLL



Burroughs Sensimatic Accounting Machines



Wherever There's Business There's





Do More Business
with



**Unit Air
Conditioners**

Restaurants, hotels, clubs, stores, offices, theatres, beauty shops, banks and industrial plants—to mention a few—find these units soon pay for themselves in increased trade. Frick conditioners are the choice of those who want superior equipment—with extra cooling surface, greater dependability, more quietness, beauty and adaptability. Three sizes: 3, 5 and 7½ horsepower.

Frick Unit Conditioners Have a Hand-some Blue-grey Ham-mermatic Finish

perior equipment—with extra cooling surface, greater dependability, more quietness, beauty and adaptability. Three sizes: 3, 5 and 7½ horsepower.

DEPENDABLE REFRIGERATION SINCE 1907
FRICK CO.
WAVESBROOK, PENNA.
U.S.A.

Also Builders of Farm and Sawmill Machinery

ACTION
of the body muscles
keeps the body fit
the

EXERCYCLE®

way

Silent—Vibrationless
Designed for Home Use



Here is the secret used at home by thousands of men and women—including many physicians—to lick the feeling of staleness and stiffness from lack of exercise. Exercycle represents an altogether new experience, concentrating the motions of horseback riding, rowing, swimming, cycling in a most pleasant form. Gives your body action where you need it most. Helps bring in waistline; improves circulation tone, and regularity disturbed by sedentary living. A great husband-and-wife treat. You'll like what Exercycle does to the way you feel and look. Send for booklet—free.

(Also distributed in Canada)

MAIL COUPON FOR FREE BOOKLET

EXERCYCLE CORPORATION
597 Fifth Ave., New York 17, N.Y.
Please send me your illustrated
brochure (free)

Mr. _____
Mrs. _____
Miss _____
Address _____

(Please Print)

ADVERTISED
AMERICAN MEDICAL
ASSOCIATION
PUBLICATIONS

City _____

Zone _____

State _____

NBS-54

highways. One would be for the states to embark on greatly accelerated highway construction programs, and to put primary emphasis on the nation's 40,000 mile interstate system. Some states are doing this.

The other would be a greatly expanded federal-aid highway program, with up to \$1,000,000,000 earmarked annually for improvement of the interstate system. But the need for balancing the national budget slims down the chances for this kind of federal spending. In any case, Congress, like the state legislatures, has its rural representatives who would surely object to directing the federal program to the interstate system.

On the other hand, federal encouragement of toll road construction has been suggested. Proponents point out that marginal toll projects could be built immediately if the federal government were to help guarantee the investors' money. One suggestion is for a federal authority empowered to purchase revenue bonds with principal payable after private capital has been repaid. Application of federal-aid funds to toll road construction (now prohibited under the federal aid act) also has been proposed. This, proponents say, would be directly in keeping with the federal obligation to coordinate the development of the country's major national network since such turnpikes would naturally be part of the interstate system and the federal aid program would provide some federal control over their development as well as speed up improvement of that system.

Connecticut's highway head, Commissioner G. Albert Hill, has asked Congress to make a test case of his state in the application of federal aid to toll-financed routes. He pointed out recently that Connecticut's accelerated highway improvement program involving expenditure of \$375,000,000 for dual-lane, controlled access expressways throughout the state is based on an expanding use of the toll collection method, and the needed improvements in road network will be accomplished within four years instead of the 20 to 30 it would take under the old method. Thus existing federal legislation denies federal aid to an increasing portion of Connecticut's trunk highway system, he claims.

Under the federal aid concept, the states must put up money to match federal funds for construction anywhere within the 695,000 mile federal aid system. Commissioner Hill asked Congress, "Why should you care how we collect our 50 per cent matching money as long as we are putting it on a federal aid route?"

In addition to being state owned and operated Connecticut's particular brand of turnpike differs in an important respect from most of those elsewhere.

The Connecticut "semi-toll system" does not have toll booths at all points of ingress and egress. Consequently local traffic, on short trips, can enter and leave the turnpike without paying. (Even on the New Jersey Turnpike, a "closed system," the average trip length is only 42 miles.) The Merritt and Wilbur Cross Parkways have only three toll stations in their 67 miles, yet there are 41 sets of access ramps. In the words of Connecticut's highway chief, Commissioner G. Albert Hill, "the users are local people and the



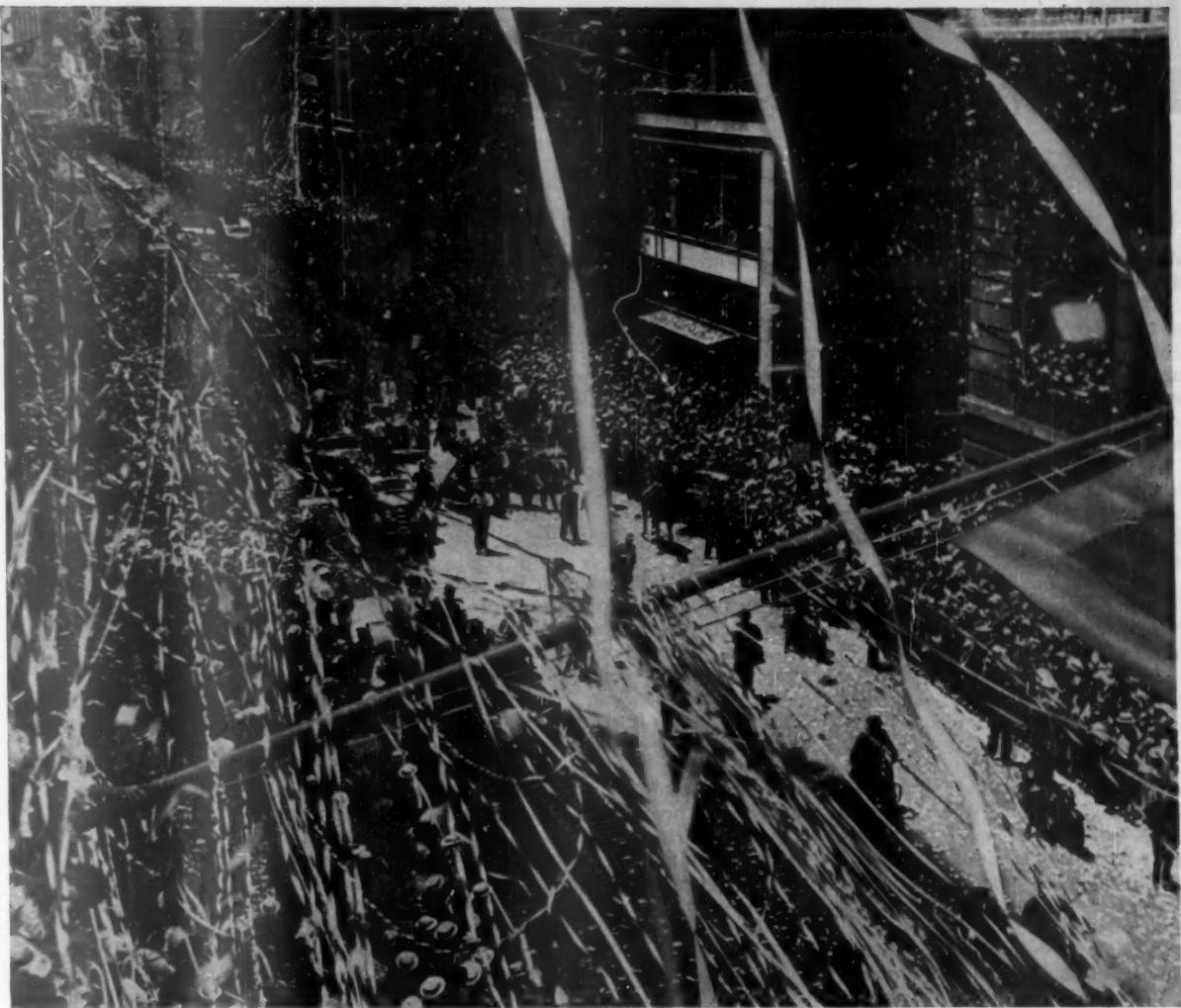
payers are through people. On closed toll roads, the users are through people and the payers are through people."

Not only does the "semi" or open type toll road get around one of the complaints often leveled at toll roads—their limited use to local traffic—but the Connecticut version tends to collect more, proportionately, from the out-of-state. This desire to make the out-of-state vehicle pay is one of the most appealing arguments for the toll system.

Mr. Hill is a strong proponent of state highway department jurisdiction over its toll roads, as opposed to the practice of establishing special toll authorities. "The best reason for setting up a special authority is to get around the state debt limit," he says. "The worst reason is to give some fellows some good paying jobs. Some believe in the authority approach because of the protection this affords should a changing administration have a different policy on highways. I don't share that belief. Whether the people of the state, through their state government, authorize the authority to borrow and build, or whether they tell their administration to do it, it's still the people's road. The bond indentures on state administered turnpikes won't let the road go to hell even if politics enters!"

Mr. Hill has also pointed to the possible danger of profit-seeking investment representatives and con-

(Continued on page 98)



Where does all the paper come from?

Read why it takes a never-ending parade of bank loans to meet all of America's paper needs.

To trace paper's source take any map of North America.

Start deep in the southland's piney woods—follow the coastal timber line through New England to the rocky shores of Labrador—cut over to Hudson Bay—drop down through Ontario and the Great Lakes area—then swing out through British Columbia—head south and stop at the Klamath Basin...and you've covered the most successful paper route in history!

What made it so?

Trees made it so. Trees and a handful of visionary individuals with sweat on their hands and pride riding like

wood chips on their shoulders.

Out where the trees are topped at 90 feet they're known as "the companies." On Wall Street's "big board" they're listed as pulp and paper manufacturers. In any man's language they've collectively contributed great things to the whole continent's well-being, and they've had the help of America's banks to do so.

Bank loans go to work

Bank loans help supply money to cut, transport and stockpile the logs. Bank loans help put up multi-million-dollar pulp mills...back the chemistry that cooks wood fiber into pulp. Bank loans put cash on the line to convert pulp into paper products for home and business use...to distribute a thousand-and-one paper items. Bank loans finish their paper work

by helping to finance the final production and distribution of paper items—from personal checks to picnic napkins. Why?

Because it's competitive banking's job to make the community's idle money available whenever and wherever business finds opportunities for profitable enterprise.

Under these conditions there are jobs for men and women, returns for investors and better products for the entire nation.

Chase National Bank, first in loans to American industry, is proud of banking's contribution to the progress of our country.

• • •
The CHASE National Bank
OF THE CITY OF NEW YORK
(Member Federal Deposit Insurance Corporation)

E xotic fruits challenge old favorites

MR. and Mrs. America are in for a big taste surprise.

Experiments now being conducted in the southeastern corner of the United States will result eventually in stocking the refrigerators of the nation with such exotic and little known fruits as the litchi or the soursop.

People who may never visit the tropics will be consuming sliced mangoes as they now do peaches. Holiday punches will be spiced with carambola or monstera.

All this is not in the year 2000. The time for serving these tropical fruit frozen concentrates is now—today.

It is already being done at the University of Miami's Tropical Food Research Center, ten miles south of the main campus at Coral Gables, Fla. Here, on the 2,080 acres occupied by the Richmond Naval Air Station during World War II, experiments on a number of fruits are well past the research stage and are actually being offered commercially on the frozen food market. This is made possible through the university's policy of releasing products to commercial sources when the experimental phases of its investigations are ended. A small percentage of royalty is then returned to the institution for further research.

The pureed banana is one of the center's products. A recent best seller on the Miami frozen food market is a new drink called guajava. Smooth, pink and refreshing, this concentrate of guava and lime is a natural for party cocktails, both alcoholic and not.

Other tropical drinks will appear as work on them is completed.

Few Americans have ever tasted a tangy tropical fruit called the Barbados cherry. It has more vitamin C than any fruit tested thus far. By a judicious blending with citrus juices scientists have transformed the Barbados cherry into a palatable puree as well as a frozen concentrate, pale reddish in color. It is now ready for the market in both forms.

Many Americans recall the days when the orange appeared only on the Christmas tree or tucked in the toe of a yuletide stocking. Today the citrus fruits of California and

Florida are the basis of industries involving hundreds of millions of dollars. The perfecting of frozen orange concentrate in the University of Florida laboratories less than a decade ago did much to accelerate orange growing as, with one sweep, the problem of waste from overripe fruits or a glutted market was removed.

The same story may be repeated in other tropical fruits, but there is no danger that citrus fruits will disappear.

At its experimental farm, the university considers the cultural problems of growing fruits in commercial amounts. The sapodilla, akee, tangelo and sapote come in for their share of attention.

Actually, the breeding and growing possibilities of these fruits is as yet unexplored. The apple reached its peak of acceptability after thousands of years of breeding and selection.

By comparing the composition of fruits raised in the temperate zone—the apple, peach, even the grape and prune—with those of the tropics it has been discovered that tropical fruits are richer in nutritive value. Most tropical fruits are on the tree from six to 12 months before maturing, compared to three to five months for those grown in the temperate zone. This allows for the building up of food material within the tissues. The higher sun intensity is still another factor in bringing up the food value.

The main factor in preventing any widespread marketing of most tropical fruits has always been the fact that they do not lend themselves to long-distance shipping. Enormous quantities lie wasted on the ground all through the Caribbean area. Aside from pineapple and citrus fruits, few tropics have been preserved whole or as juices.

Freezing meets the requirements for shipping.

The university, acting as technician-farmer-distributor-teacher, receives an increasing number of Spanish-speaking students from the Caribbean and Latin America who come to study in food technology and go back to spread the techniques in their native lands.

The tropical fruit aspect of the re-

search center makes it unique but the scientists deal in vegetables as well. Of the 92 school cafeterias in the area, 86 are being supplied with pre-packaged vegetables formerly called "waste."

Recognizing the fact that it is trail-blazing, the center experimented with undersized ears of corn, packaging them as four-inch and again as three-inch portions, the latter four to a package. Put on the Miami market the four-inch and even the six-inch cobs were turned down by the buying public in favor of the carton of four three-inch sections.

When this fact was digested, a machine was designed to snip and cut this size and to replace the human hands formerly required for the motions.

One of the exciting discoveries in the vegetable field is that dehydrated broccoli contains around ten per cent more protein than alfalfa.

A tropical spinach introduced from Java is being tested and is found to freeze well. Moreover, the product has been introduced to a critical segment of the consuming public—school children. They approved it by asking for more.

Avocado ice cream, not yet perfected although startlingly good, may prove a boon to ice cream manufacturers as a butterfat substitute for mass production. Purees of enticing tropical fruits to top ice cream sundaes are definitely in the future.

Like the concentrates they are already neatly packaged in the center's laboratory, standing in rows for visiting tasters.

High on the list of popular items to be tasted at the laboratory are tropical wines. Long ago, before the railroad reached Miami, settlers made pineapple wine, mango wine, and grapefruit wine.

Today the university is taking up the work and from "waste products" is turning out highly acceptable guava wine, with a dash of elderberry for color.

One thing appears certain: One way or another, more tropical fruits will soon be appearing on tables throughout the country as common fare.—HELEN MUIR

END

Brilliant Boss of Atom's Future

(Continued from page 38)
of the scientists and civilian officials of the AEC. It also surprised Washington correspondents who remembered the epic battle that was fought in Congress eight years ago to transfer the atomic project from military to civilian control. Suspicion that the military camel was again getting its nose into the atomic tent was heightened by knowledge that General Nichols was a protege of Lt. Gen. Leslie R. Groves, who headed the atomic program during the war and who was the chief postwar advocate of Army management.

Even those who were distressed by his military background agreed, however, that Kenneth Nichols has unique qualifications for supervising the mass production of A- and H-bombs. Indeed, studying his record, you get the uncanny feeling that he was somehow predestined for this job and that he spent all his life unconsciously preparing for it.

His preparation began almost as soon as he was born, 46 years ago, into a prosperous middle-class home in Cleveland, Ohio. His father was a building contractor, and young Nichols began tagging after him to



construction jobs as soon as he was old enough to get about without falling into freshly dug holes. By the time he entered school, Kenneth had made up his mind, and confided to his mother, that he wanted to "build things" when he grew up. When he graduated from high school he was enrolled in Cleveland's Case School of Applied Science to study engineering.

Here fate stepped into his life again. His mother happened to see a movie called "Classmates" that glorified cadet life at West Point, and incidentally stressed the excellence of the Military Academy's engineering courses. A few days later she read a newspaper notice that Congressman Theodore E. Burton was holding competitive examinations for appointments to West Point. No member of the Nichols family had ever been in the Army; in



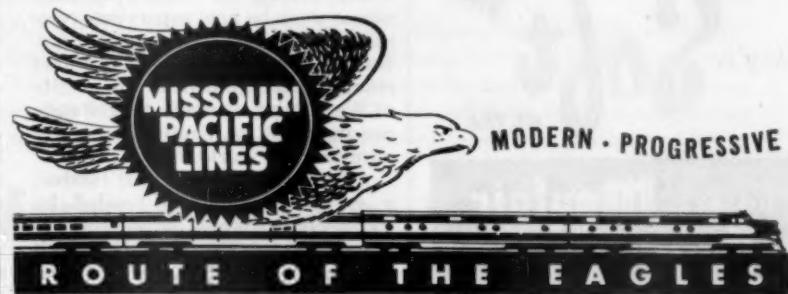
MO-PAC

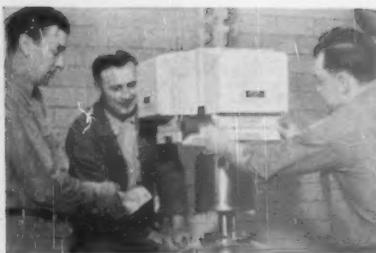
to 10,000 miles
and
11 states later!



IN 1852, the Mississippi Levee at St. Louis welcomed the first locomotive west of this great waterway . . . to provide service along the first five miles of new Pacific Railroad track.

It marked the beginning of a new era . . . one of growth . . . for both the West-Southwest and MISSOURI PACIFIC LINES. For, out of that unloading scene of the first locomotive grew a 10,000-mile railroad network serving shippers and travelers in the West-Southwest with a *modern-progressive* transportation system.





3500 . . . less 25%

A mid-western meat-packing plant . . . employing 3500 people . . . after a year of testing, found that Mosinee towels dispensed from Sentinel Controlled-type Cabinets actually cut towel consumption 25%. Towels previously used, cost less per case . . . but Mosinee Towels cost less to use . . . so this plant has standardized on Mosinee "Controlled" Towel Service.

Write for free samples and name of nearest distributor.



they're **Soft** at the



fact, Kenneth at that point in his life had never laid eyes on a commissioned officer and had not the vaguest desire to become one. But his mother hustled him off to take the examination, and a few weeks later Kenneth found himself on a train headed for West Point.

For a boy who had never played soldier, he displayed a surprising affinity for military life.

"Nick swallowed the system hook, line and sinker," one of his classmates recalled recently. "He was one of the most devout West Pointers I've ever known."

Cadet Nichols graduated fifth in his class in 1929 and received the traditional reward for high academic achievement at West Point—assignment to the Army's elite Corps of Engineers. His first post was in Nicaragua, where the Engineers were surveying a canal that never got built. There he met and made friends with First Lieutenant Groves.

Officers who knew Lieutenant Nichols during that period remember him as an indrawn, intellectual youth who spent a lot of time reading technical books. Flood control was the chief occupation of the Corps of Engineers between wars, and Lieutenant Nichols was quietly determined to become the best dam-builder in the Army (a frustrated ambition he still cherishes.) Because of his brilliant record at the Point, he was able to persuade his superiors to let him continue his studies in hydraulic engineering. He went home to the states, got a master's degree from Cornell, and then won an exchange student fellowship to Germany's famed *Technische Hochschule*. Some of his fellow officers thought he was foolish to waste so much time in academic labors that would bring him no promotions. Nichols himself realized that Academy classmates who went directly into field commands were pulling rapidly ahead of him. But he was, and is, afflicted with a restless intellectual curiosity, the kind of mind that cannot tolerate half mastery of any subject.

One result of his dogged pursuit of higher education was a doctorate which, among the famous scientists whose work he now supervises, commands more respect than any number of military decorations. Another result was assignment to the faculty at West Point, where he taught engineering until the United States was plunged into World War II.

A few months after Pearl Harbor, a group of scientists headed by Vannevar Bush and James B. Conant persuaded President Roosevelt that the United States should embark on an all-out effort to produce

an atomic bomb. They told him that the work would be fantastically difficult, time-consuming and costly, but that success would revolutionize warfare. Mr. Roosevelt adopted the idea and orders were issued to the Corps of Engineers to set up a secret project under the code name, "Manhattan Engineer District." Col. James C. Marshall was placed in command as district engineer.

Nichols, then a lieutenant colonel, had been serving under Colonel Marshall since the outbreak of war, building airfields and ordnance depots in New York and Pennsylvania. He had just received orders to field duty which would have taken him overseas. On a hot July afternoon he was summoned to the office of Colonel Marshall who pointed to a large envelope of papers, stamped "secret," lying on his desk.

"I've got a big new construction job here," he said, "and I want you to help me." Colonel Nichols re-



plied that he was looking forward to field duty and did not want another stateside assignment. But the sealed envelope aroused his curiosity.

"What is it?" he asked.

"It's terrific," said Colonel Marshall. "There's never been anything like it. But if I open this envelope, you're in. I can't show it to you under any other circumstances."

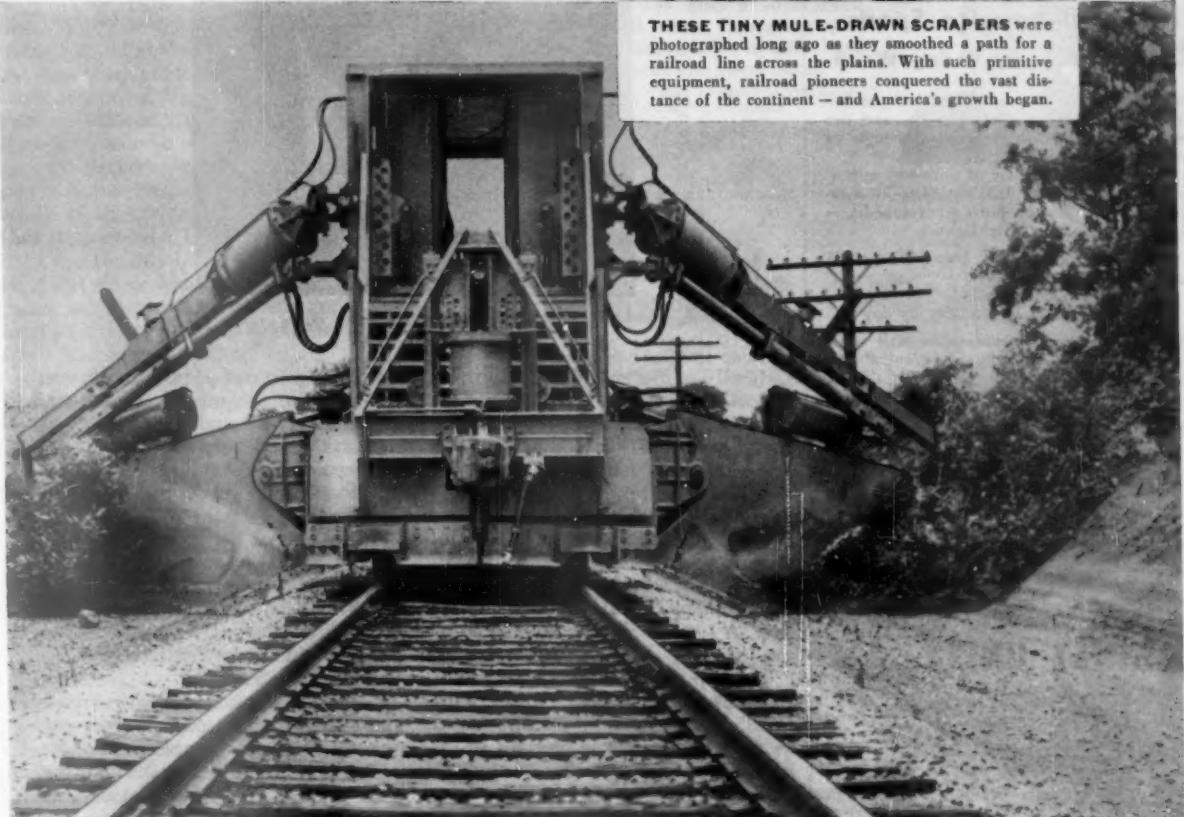
For several agonizing minutes, soldier Nichols wrestled with engineer Nichols. The engineer won, Colonel Marshall opened the envelope, and Colonel Nichols was the second officer assigned to the Manhattan Project.

Later, after General Groves had been placed in over-all command of the atomic undertaking, Marshall was transferred to another assignment and Colonel Nichols was promoted to district engineer. His orders were simple but staggering: Produce an atomic bomb at the earliest possible date. Scientists had been working secretly on theoretical aspects for several years and were convinced it could be done; but know-how of the actual production process was simply nonexistent. Every step of the technology, from raw material to finished product, was

The Railroads opened the way for America's growth . . .



THESE TINY MULE-DRAWN SCRAPERS were photographed long ago as they smoothed a path for a railroad line across the plains. With such primitive equipment, railroad pioneers conquered the vast distance of the continent — and America's growth began.



TODAY, THIS MODERN SPREADER-DITCHER smooths the way for high-speed giants of the rails. Other power-driven marvels can pull and drive spikes, lay rail, tamp ballast — do many of the construction and maintenance jobs so vital to railroad operations.

AND THEY'RE STILL BLAZING TRAILS FOR PROGRESS!

The America in which we live has grown and prospered along paths pioneered by its railroads — and pioneering still goes on. Just since the end of World War II, the railroads have spent more than \$9,000,000,000 on improvements. And they are going ahead with their improvement program.

As a taxpayer, you will be glad to know that the money to pay for the new and better tracks, terminals, signals

and all the rest — as well as new cars and locomotives — is raised by the railroads. None of it comes from your taxes.

It's money well spent, too, for it helps the railroads to serve you better in doing their big job of carrying more tons of freight, more miles than *all* other forms of transportation combined — and doing it at a lower average charge than any other form of general transportation.

ASSOCIATION OF AMERICAN RAILROADS
WASHINGTON 6, D. C.

You'll enjoy
THE RAILROAD HOUR
every Monday
evening on NBC.



New All-America Sports Calendar... by Christy Walsh

Here's an advertising medium that reaches the men you sell or want to sell... and ties your sales message to their favorite topic of conversation — sports.

A practical size calendar of universal appeal for home or office... final authority for armchair experts. It's a sports encyclopedia — facts, figures, photos. Highlights:

- All-American football choices since 1924
- Famous sports legends
- World Series history
- Headline sports results, day by day

Your Shaw-Barton representative will show you this all new All-America Calendar and explain exclusive territory franchise. Call him in or write home office.

SHAW-BARTON
Calendar and Specialty Advertising

GENERAL OFFICES AND PLANT, COSHOCOTON, OHIO
SALES OFFICES IN PRINCIPAL CITIES



FOR NEW BUILDINGS OR FOR MODERNIZATION

HEAT with steam or hot water — cool with chilled water. Here in a single unit you can get quick, quiet distribution of heated or cooled air, with or without ducts. Inexpensive accessories permit filtering and introducing of outside air. Sizes and models for floor, wall or ceiling installation. Ideal for replacing old-fashioned radiators.

Tear out coupon — mail today!



MODINE MFG. CO.
1562 DeKoven Ave., Racine, Wis.
Send me free copy of Bulletin 552.

Name _____
Firm _____
Address _____
City _____ Zn _____ State _____ C-1205



Maj. Gen. Kenneth D. Nichols

EDWARD BURKS

radically different from anything American industry had done before. To take just one example: Uranium metal, previously produced only in gram lots as a laboratory curiosity, now had to be procured by hundreds of tons and it had to be refined to a degree of purity which industrial chemists at first considered incredible. One scientist who worked on the problem says that every time he saw an Ivory Soap ad, he winced at the admission of gross impurity.

The physicists reported that A-bombs could be made either with U-235, the fissionable isotope found in trace quantities in normal uranium, or with plutonium, the man-made element resulting from neutron bombardment of uranium in an atomic pile. No one knew which explosive would be most efficient, so the Manhattan District set about to produce both—U-235 at a gaseous diffusion plant at Oak Ridge, and plutonium in great concrete-shielded piles, cooled by the waters of the Columbia River, at Hanford.

In each case, Colonel Nichols started with a wilderness site and had to build the plants and their supporting facilities from scratch.

Sweating over the design of history's first atomic plants, he learned one of the basic lessons of top management. You cannot get rid of tough problems by turning them over to a committee of experts. Time and again the experts turned in divided reports. There were four possible ways of extracting the U-235 needle from the uranium haystack, and the choice among them was largely a matter of "guts and guesswork." Then there was the problem of

scheduling output. If production was speeded up, the quality of the fissionable end product went down. A delicate balance had to be struck between the urgent need for haste and the equally urgent need to make sure the bomb would go off.

In a recent interview, General Groves said the rate-of-production problem was one of the hardest that came up on the wartime project, and it was finally solved only because of Colonel Nichols' "intelligence, persistence and drive."

"None of our scientific personnel, and that included some of the most distinguished, world-renowned physicists, were willing to undertake the problem," he said. "A solution was reached by Colonel Nichols personally with, of course, the assistance of mathematicians and other scientists on the routine calculations. To my mind it was one of the outstanding achievements from a scientific standpoint of the entire project."

General Groves said such make-or-break decisions were part of every day's work for Colonel Nichols in those suspenseful months when the United States was pouring \$2,000,000,000 and invaluable amounts of scientific manpower and scarce materials into the A-bomb gamble.

"The Manhattan District was full of tough problems," he recalled. "It was an exceptional day in which several of them did not have to be solved and problems which would normally be classified as super-tough were not unusual. Many such problems, and they ran the whole gamut — scientific, technical, engineering, military, labor, management, public relations, political and even re-

ligious—were handled by Nichols without my even knowing about them.

"I can think of no one who could have done what he did."

The loneliness of decision was intensified by the fact that Colonel Nichols could not talk about his problems, even at home. He imposed rigid secrecy on all employees of the Manhattan District and, unlike some commanders, was careful to obey his own rules. His wife, Jacqueline, a charming and vivacious woman, lived at Oak Ridge throughout the war, entertaining the constant stream of VIP's who came to inspect, without having any inkling from her husband what was up. She guessed that a mysterious new weapon was involved and, as a faithful reader of the comic strips, concluded that it must be a Death Ray.

"I was terribly let down," she once confided to a friend, "when it all came out in the newspapers and I learned that it was just a big bomb Nick had been building."

After the war, when Congress turned the atomic program over to civilian control, Colonel Nichols re-



mained in close touch with developments, first as a consultant to the Congressional Atomic Energy Committee, then as senior Army member of the AEC's Military Liaison Committee, and head of the Armed Forces Special Weapons Project (AFSWP).

The latter post, which brought him the two stars of major general at the comparatively youthful age of 41, put him in command of a joint Army-Navy-Air Force unit devoted to exploring battlefield uses of atomic weapons.

When General Nichols took over AFSWP, the A-bomb was strictly an offensive weapon, suitable only for strategic air bombardment. In common with many Army officers, General Nichols felt that the full value of America's atomic lead could not be realized until tactical atomic weapons were developed—weapons that could be used defensively to check the advance of an enemy ground army or to help guard American cities against air raids.

Accordingly, he threw his full weight behind the Army's controversial project to develop an atomic

"70% collections from overdue accounts"

"By sending out 101 collection telegrams, we received full payment of 55 accounts and partial payment of 15—at a collection cost of less than 1% of the total amount received. There was also a substantial saving in clerical time. Collection telegrams, which we began using in 1951, have proven both efficient and economical."

M. L. WEIRICK, Assistant Treasurer
The Parker Pen Company
Janesville, Wis.



"Telegrams keep us abreast of market changes"

"Our business—selling commodities on behalf of Middle West and East Coast principals—requires very fast and accurate communication to keep abreast of market changes and other developments. To avoid loss and to keep in touch both day and night, we use telegrams. They're dependable and fast!"

EDMUND B. TAYLOR
E. B. Taylor Company
Los Angeles, Calif.



"Achieved record-breaking distribution and sales... thanks to telegrams"

"In one recent promotion, we sent out 1800 telegrams that played a major part in producing immediate record-breaking distribution and sales—accomplishing in days what would otherwise have taken many months. Our business has grown almost in direct proportion to our use of your services."

JENO F. PAULUCCI, President
Chuk King Sales, Inc.
Duluth, Minn.



You, too, will find that . . .

when it means business
it's wise to wire



WESTERN UNION



Cut down on all this



To just this

New KENFLEX floors really make maintenance easy

Easy maintenance means *low-cost* maintenance. And, because KenFlex Vinyl Tile is non-porous, it is one of the easiest of modern floors to keep clean. Dirt from tramping feet can't penetrate it . . . greases, oils, acids, alkalis and alcohols can't harm or stain it. KenFlex seldom needs

washing . . . never needs waxing except for extra gloss.

But, that's not all! KenFlex gives you clearer colors . . . low-cost installation . . . years more trouble-free wear. And, it is priced far less than many floors that fade, pit, scratch and soon become costly to clean.

Get full details on KenFlex Vinyl Tile . . . and all the other fine Kentile, Inc. resilient tile floors . . . from the Kentile Flooring Contractor. He's listed under FLOORS in the Classified Phone Book.

KENFLEX
VINYL TILE

KENTILE • SPECIAL KENTILE • KENCORK • KENRUBBER • KENFLEX
Kentile, Inc., 58 Second Avenue, Brooklyn 15, N. Y. REG. U. S. PAT. OFF.

cannon. A fierce battle was fought backstage in the Pentagon over this project, and General Nichols, in the thick of it, earned the undying enmity of some high Air Force officers who regard the 280 mm. gun as a cumbersome and unnecessary substitute for an attack bomber. During one of the brisk "discussions" of the cannon, an Air Force general remarked bitterly that he could not understand why the Army needed such a weapon.

"If the Air Force did understand why ground troops need artillery support," General Nichols retorted, "we wouldn't need this cannon."

The atomic cannon is now in production, and one battalion is already on duty in western Europe.

Later General Nichols was involved in a similar intramural war over the Nike, the new anti-aircraft guided missile with which the Army plans to guard Washington, New York, Detroit, Pittsburgh, Chicago and about 30 other major cities. He got into the guided missile field in the fall of 1950. K. T. Keller, the hard-driving board chairman of Chrysler Corporation, was called to the Pentagon as a special assistant to



the Defense secretary, with the assignment of getting guided missiles off the drawing boards and into production. He heard about General Nichols' capacity for getting things done, even if toes were tromped on in the process, and picked him for his deputy. Most of the work General Nichols did in this field is still secret, but it can be said that he gave impetus to efforts by all of the services to perfect long-range, atomic-warhead guided missiles that may be the most important weapons of any future war.

Although General Nichols was well known (if not always well liked) in military circles, his name was almost unknown to the general public when he was picked to manage the AEC.

This was as he wished. He has a sincere dislike of personal publicity and has tried, with considerable success, to keep his name out of the papers throughout his career.

His allergy to publicity apparently stems primarily from a conviction that it breeds friction and

jealousies that play hob with teamwork on a job. No one, not even those who love him best, would attribute his attitude to natural humility. It is evident to anyone who meets him that he is imbued with a vast self-confidence. He regards Kenneth D. Nichols as a hell of an engineer, and sees no reason to be hypocritical about it.

Because he is self-confident, and because he learned from the Manhattan District ordeal that you can't get results by being wishy-washy, General Nichols runs his shop in a manner that his admirers call "decisive" or "forceful." His detractors prefer the word "ruthless." The consensus seems to be that he is a good man to work for if you deliver the goods, but very tough on those he regards as bunglers. He has a habit, which he apparently picked up from Mr. Keller, of playing the Devil's Advocate in staff conference, baiting his associates by challenging everything they say, just to make sure they have thought the matter through. He has a withering scorn for anyone who suggests that something be done in a certain way simply because it says so in the book.

General Nichols is also a strong believer in the "see for yourself" school of management. His first action as AEC manager was to spend six weeks visiting all of the major installations and sizing up the men in charge. He returned to Washington satisfied that he heads "a damn good organization."

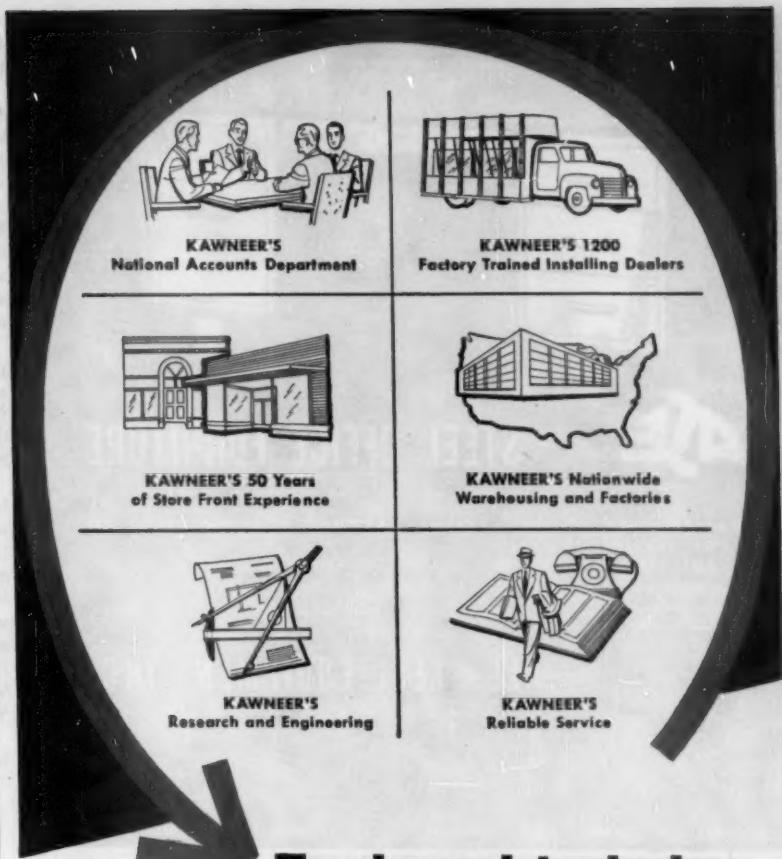
But he also decided that there is room for improvement, both in weapons production and in speeding the development of atomic power for industrial use.

He is now trying to put more steam behind both programs.

"We can't afford to be complacent about our production of atomic and hydrogen weapons," he said. "The stakes are too great. It is not enough to think we are ahead of the Russians. The question I keep asking everyone in the organization is: Can we get it done faster?"

Although he runs the biggest socialized industry the world has ever seen, General Nichols is an aggressive exponent of free enterprise. He wants to maintain, and if possible extend, the AEC's practice of farming out actual operation of plants to private contractors. He sees three advantages to this system.

"It enables us to tap the great reservoir of know-how in private industry. Also, a corporation, working under contract, can offer higher salaries than a government agency and attract the kind of men we need to run these plants. Finally, it is much easier to terminate a contract,



Equipped to help solve your building front construction problems

From hotel chains to grocery chains, Kawneer has equipped its organization to service your needs. You may be in the stage of developing prototype installations . . . you may have an established building front style . . . or, you may be in between stages. In any event, *The Kawneer Touch* gives you a number of services that can save days of working time.

Quick delivery may be one of your problems. Kawneer's widespread warehousing system

and large dealer organization can fill the bill. You may be concerned about practical, efficient and economical installation. Kawneer's 1200 factory trained installing dealers are on hand to fulfill your most rigid specifications. Maybe it is a question of applying Kawneer's line to your design, or developing a special line of products to suit your needs. The National Accounts, Research and Engineering Departments are onhand to give you all the assistance you need.

Feel free to call on Kawneer for help. We are "Johnny-on-the-spot" to your Executives, Architects, Designers, Field Men, or anyone in your organization who may

have a question or problem for us to answer. Phone us now, or write Kawneer, Niles, Michigan.



ASE

STEEL OFFICE FURNITURE

LONG-LASTING BEAUTY BUILT-IN

Beauty and Durability are built into all ASE steel office furniture and equipment. ASE desks contribute much to office efficiency with their functional design, ease of convertibility and evident fine quality.

ALL-STEEL EQUIPMENT INC.
AURORA, ILLINOIS

CABINETS CHAIRS TABLES BLUEPRINT FILES FILING CABINETS

MIAMI'S BIG SHOW...

FOR BUYERS... MANUFACTURERS... INVESTORS

See some of the world's finest merchandise, all made in Miami's smokeless, sunlit factories... displayed in a great exposition providing ample proof that light industry thrives on Miami's ideal production, living and working conditions!

MARCH 5-14

5th ANNUAL MIAMI INDUSTRIAL EXPOSITION

FREE! "MIAMI ECONOMIC REPORT"
Facts and Figures about Miami's unique advantages for new industry.

Write:
Industrial Division, City of Miami
320 N. E. 5th St.
Miami, Florida

DINNER KEY EXPOSITION HALL
Sponsored by the City of Miami, Florida

when a particular job is finished, than it is to cut down a government payroll."

As the latter remark indicates, General Nichols is economy-minded, at least in the sense that he feels a personal obligation to make sure the taxpayers are getting their money's worth in the atomic program. "The funds available for defense are limited," he said in explaining his viewpoint on budget cutting. "It would be almost treasonable to waste any of them."

The testimony of his business and professional associates is almost unanimous in depicting General Nichols as a cold-blooded executive, dedicated to results and scornful of human frailty.

But this is the 8-to-5, or office-hour, Nichols. Like many other men who carry heavy responsibilities, he seems to undergo a complete change in personality while driving from the AEC's heavily-guarded white marble headquarters on Constitution Avenue to his two-story, frame-and-stucco home near the Washington Cathedral in northwest Washington.

Mrs. Nichols is undoubtedly the best authority on what the new



atomic boss is really like, since she has studied him at close range, with a loving but discerning eye, for 21 years. She was amazed to hear that the people who work with him downtown regard him as a pretty hard-boiled fellow.

"He certainly has them bluffed," she laughed. "Nick is actually very gentle by nature. He is always complaining because he didn't get into combat, but I don't think he could have stood the sight of people getting shot up. He will go to great trouble, working in the garden, to keep from killing a worm. And the day the children had to have shots, it was Nick who almost fainted."

The children are David, 8, a smart, serious-minded boy who sings in the Cathedral choir, and Jacqueline Ann, 9, a blonde, exquisitely feminine creature who is currently undergoing a great deal of ribbing in the Nichols' household because she asked her father if the AEC also had

colonel managers and major managers.

Although David has a somewhat better grasp of his dad's vocation, he still thinks of him, not as the man who made the first A-bomb, but as the genius who built a vast HO gauge model railroad layout in the basement.

General Nichols has also exhibited his engineering skill on the home front by building a concrete patio, a stone wall, and a woven picket fence, all of which are properly admired by his neighbors.

But he is still chafing under the peculiar fate that has kept him from building the one thing he feels best prepared to build—a dam. Recently he bought a sizable farm in the Maryland foothills outside of Washington, ostensibly as a site for a summer home.

"But I know better," Mrs. Nichols said. "There is a creek running through the farm, and it was the first thing Nick spotted. He's not going to build a house. He's going to build a dam."

General Nichols is clearly devoted to his home and family, and he has built his private life almost exclusively around them. His social activities center around a few old Army friends, mostly West Point classmates, who exchange dinner invitations with the Nichols. He enjoys good food, particularly his wife's superb French cooking, but he drinks very little and does not smoke. He is not a joiner and the only membership to which he attaches any importance is in St. Albans Episcopal Church, a few blocks from his home, where he attends services. His principal hobby, besides putting around the house, is reading military history.

Napoleon is his particular hero, and the shelves of his upstairs study are crammed with books about the Napoleonic Wars. He also admires Douglas MacArthur and Robert E. Lee.

Watching General Nichols at work in his flower beds, it is hard to believe that this is a man who has devoted most of his adult life to producing the most awful engines of mass destruction ever devised. But he is not troubled by such thoughts.

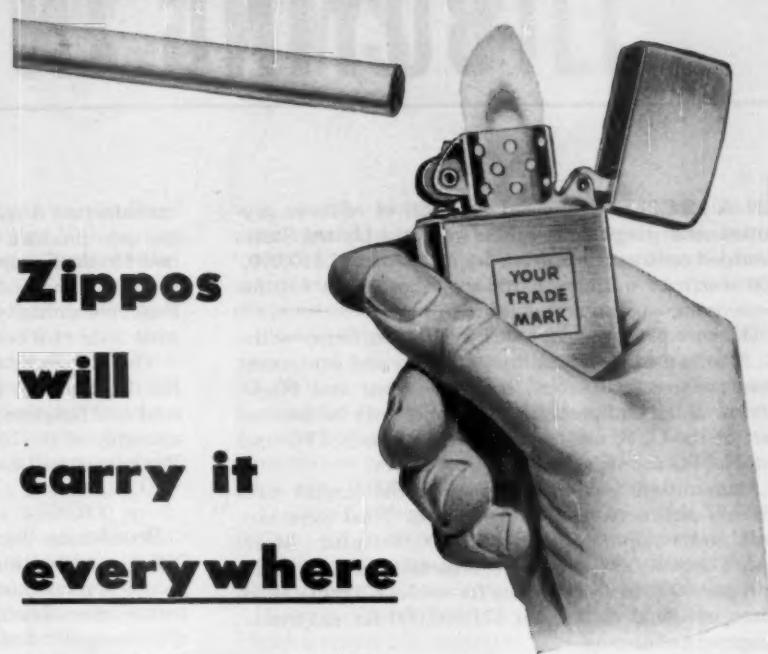
"No one hates war like a professional soldier," he said recently. "That's a genuine fact, not a shibboleth. I believe that our superiority in atomic weapons is a deterrent to war, a way of keeping the peace. That's why I have my heart in my work."

His eyes came to rest on a picture of David and Jacqueline.

"Nobody wants an atomic war less than I do." **END**

Proud of your trademark?

Zippos
will
carry it
everywhere



A lot of hard work—a lot of future hopes—are wrapped up in your firm's trademark. It's the face your business shows the world. Why not have it still more widely known—in full, rich color on the gleaming surface of a Zippo?

Give Zippos as a business gift and you may be sure that your customers will use them. 20 . . . 40 . . . 60 times a day, your message will flash before

them, just as surely as the Zippo flashes into flame.

There's something about the ease of use and utter reliability of Zippo that makes it part of a smoker's personality. It's carried everywhere—and your message with it. It's actually guaranteed to work forever, even in wind or rain. That means utmost mileage for your message, at modest investment. Mail coupon for details.



ZIPPO®

GUARANTEED TO WORK FOREVER

ZIPPO MANUFACTURING COMPANY, BRADFORD, PA.

In Canada: Zippo Manufacturing Co., Canada Ltd., Niagara Falls, Ont.

Zippos
Manufacturing Co.
Dept. N-2, Bradford, Pa.

Please give me full information about business gift Zippos—prices in large or small quantities, time of delivery, opportunity to use color, and the help your design department will give us in making a beautiful and distinctive gift.

Name _____

Firm _____

Address _____

BUYING IN EUROPE

IN A LITTLE publicized program of offshore procurement during the past fiscal year, the United States awarded contracts in Europe for more than \$1,590,000,000 worth of military hardware—more than \$10 for every man, woman and child in America.

Offshore procurement (OSP) is the purchase by the U. S. armed forces of military supplies and equipment from sources in Europe, the Near East and North Africa. Such equipment and supplies may be used as part of the U. S. military aid program to NATO and non-NATO countries such as Yugoslavia.

Ammunition and explosives took the largest part of these contracts—\$673,000,000 plus. Next came aircraft and equipment with \$410,000,000 plus. More than \$106,000,000 went in contracts for ships, more than \$82,000,000 in contracts for vehicles (other than transport), and more than \$71,000,000 for electronic equipment contracts.

Involved were some 350 prime contractors of 15 nations producing hundreds of items from complete aircraft and Centurion tanks to .30 caliber ammunition.

The Army placed the bulk of the contracts, both in numbers and total—141 totaling \$912,000,000 plus. The Navy obligated \$211,000,000 plus on 77 contracts and the Air Force gave orders, mostly for airplanes and equipment, of \$472,000,000 plus.

Offshore procurement is part of over-all procurement under the Mutual Defense Assistance Program of foreign military aid and was begun in fiscal 1952 with the obligation of just over \$600,000,000. It was dedicated to several important principles of American policy. Broadly, these are:

1. *To increase Europe's long-run industrial self-sufficiency.*
2. *To broaden Europe's industrial mobilization base, putting the producer nearer the consumer for strategic, political and economic reasons.*
3. *To help meet military needs more effectively.*

There are a lot of lesser principles, too—manpower utilization, supplementing U. S. production, increasing European productivity and helping in an important way to relieve the European dollar shortage.

The current OSP aircraft program illustrates point No. 1. Under this plan the U. S. Air Force agreed to buy \$228,000,000 worth of European-produced jet fighters if the producing nations involved would agree to buy \$175,000,000 worth with their own money.

European military production facilities were thus put to work, facilities which might otherwise have been dismantled or altered for other purposes. European aircraft people were given that pride in design and

manufacture a man can have only when he works on his own product. And last, the contracts were a big boost to the European military aircraft industry. From such a going industry, it is hoped, the nations of Europe eventually will buy their own military planes with their own currency.

The planes contracted for were the British Hawker Hunter, made in England and, under license, in Holland and Belgium; the Mystere IV, in France; and the assembly of the North American F-86 Sabre, in Italy. The planes will be used in European air units.

Broadening the industrial mobilization base (point No. 2) and putting the producer nearer the consumer means several things. In ammunition, for instance, it means re-establishing an industry which the Germans systematically destroyed, and spreading contracts from Norway to Turkey at a tremendous saving in money and time. The cost of ammunition doubles and multiplies with the distance it must be moved. The time lag between factory and firing point can be months if an ocean and thousands of land miles are involved.

It also means the strategic location of NATO production within the entire NATO area. It means shortening supply lines, thus lessening the chances of their being disrupted. It means strengthening the economies of the nations involved, improving their production capacities and their skilled labor resources. It means hundreds of thousands of man-hours of labor in countries where unemployment is a major political and economic problem.

Regarding point No. 3: Obviously it is more efficient, where practical, to supply European users from European production. Standardization problems are simplified. Production can be coordinated frequently so that one manufacturer, or one group, will produce all of one item to be used in all NATO defense work.

OSP money is not a gift. The U. S. expects value received in hard, tangible NATO arms and equipment for dollars which might otherwise have gone as pure aid. As a dividend to the U. S. taxpayer, the products, particularly if a great deal of hand labor is involved, can often be bought more cheaply in Europe than in America.

Many American firms are involved in the offshore program, either through licensing, subsidiary companies, or through technical assistance. Rheem Manufacturing Company of California has sent a consultant to help European counterparts on metal components. National Gypsum, the Heckethorn Company, the Roulan Company and the Hercules Powder Company

TRIMS OUR ARMS BILL

have contributed experts on ammunition loading, rockets, fuses, and powder, respectively. Taking the major OSP countries individually with some of the results:

Italy—For this overpopulated nation with its major unemployment problem, the \$382,000,000 in OSP contracts (\$241,000,000 in fiscal 1953 and \$141,000,000 in fiscal 1952) mean 230,000 man-years of work for Italian labor. Mining, electrical, petroleum, aviation, metallurgical, coke, gas and chemical industries are among those benefited. Navy contracts have opened a new radar industry, the Microlambda Company. One order to Sigme Company represents 3,500,000 work-days. Republic and North American aviation companies are providing technical help to Finmeccanica and Fiat in making spares and in assembly.

Great Britain—Fifteen of 23 Royal ordnance plants and more than 500 subcontractors are working on OSP ammunition contracts totaling more than \$100,000,000. About 50 per cent of Britain's current production of Centurion tanks is being financed by OSP. Some \$140,000,000 has gone into the fighter aircraft program. There are dozens of other contracts. Total OSP for Great Britain was \$381,000,000 plus in 1953 and \$68,000,000 plus in 1952.

France—To the war-disrupted industries of France OSP contracts have provided an incentive to the French which has resulted in construction of new facilities and installation of new production lines in the fields of ammunition, aviation, radio and electronics, steel, chemicals, mining and transportation. France's OSP total in 1953 was \$693,000,000 plus and in 1952 it was \$332,000,000 plus. One of her larger contracts went to Ford S.A.F. for ground airplane starters. OSP contracts are roughly one third the tonnage of all French naval vessels now under construction.

Belgium—Contracts for some \$8,500,000 in ammunition have enabled Belgium to establish a major European source of supply, have provided 5,000,000 man-hours of work for 2,500 skilled workers and insured continued operation, it is hoped, of two important Belgian factories. A \$2,890,000 contract for the production of submarine nets has brought about the development of a new technique for making prefabricated nets which will benefit all the Allies. Belgium's OSP total was \$89,000,000 plus in 1953 and \$18,000,000 plus in 1952.

Turkey—Orders for 1953 totaled \$8,494,000. The entire amount went for ammunition. The contracts will serve to utilize partly idle capacity in the Turkish munitions industry. Contracts include a provision for modern machinery which will raise production stand-

ards, quality control and efficiency of operation to meet specifications. Turkish personnel are being trained in modern manufacturing procedures. And these contracts help maintain and improve a vital supply point at the southern tip of the NATO defense line.

Greece—The Hellenic Powder and Cartridge Company, and several subcontractors, held contracts of \$23,000,000 under the 1953 OSP program. The order has enabled Hellenic to rebuild a large part of an industry which was destroyed during the war, and insures ammunition production in the Near East-Balkan area. Also, some 3,000 workers have jobs.

Denmark—Here the successful bidders for \$9,684,000 in OSP in 1953 were all comparatively small businessmen in ammunition and wood shipbuilding fields. Employment increase was more than 1,000 men.

Norway—\$16,822,000 in 1953 all went to Army and Navy ammunition contracts, supplies for the northern end of the NATO defense line.

The Netherlands—Most of Holland's \$52,477,000 in 1953 under OSP was let by the Air Force. Curtiss Wright Europa figured as a \$27,000,000 source for J-65 engine spare parts. Air frames for the Hawker Hunter jet fighter brought a contract for \$18,000,000. Other products included crash trucks, fuel trailers and light beacons.

Other countries to receive contracts for smaller amounts were Yugoslavia, Germany, Spain, Portugal, Luxembourg and Switzerland, the last being primarily subcontracted to a firm in France. Switzerland does not participate in the Mutual Defense Assistance Program.

All the offshore contracts were let by procurement officers of the Army, Navy and Air Force on a basis of quality, price and efficient delivery, and under rules and checks similar to those laid down by the military for contracts let in the states.

Bids were frequently rejected and purchase-wise officers advised the bidders to "sharpen their pencils" in figuring price.

The international staff of NATO provided useful information on national capacities, total requirements and indigenous production programs. All purchases were coordinated by Gen. Thomas T. Handy's European Command at Frankfurt, with carefully considered advice and help from the U. S. Regional Office in Paris. The result decreases conflict in specific areas between OSP and local demands on European resources; it correlates production to establish the most desirable base.—CLARKE NEWTON

END

Seven big problems you can help solve

WITH THE GOOD of your business in mind, and with the welfare of the country at heart, take a look at the months immediately ahead—and *beyond*.

What do you see?

You see prosperity. America going strong. Business fine.

Yes . . . and you also see some big national problems facing America—problems that will have to be met, if the country is to remain prosperous and strong this year and next, and the year after. The problems are these:

1. Economy—The need to streamline federal government operations, to eliminate unnecessary spending, to economize.

2. Taxes—The need to devise a better federal tax system.

3. Jobs—The need to keep the economy of the nation expanding on a stable basis—without sharp economic ups and downs—to create 600,000 new jobs a year to absorb the growing labor force.

4. Security—The need to improve the Social Security system, to expand its coverage, and to put it on a sound financial basis.

5. Labor Relations—The need to develop sound labor legislation, and to bring greater harmony into the labor-management picture.

6. Economic Understanding—The need to build a better understanding of the American profit-and-loss system on the part of business men, employees and the public.

7. Foreign Policy—The need to develop a foreign policy that will increase world trade and promote peace.

These problems are real.

They affect every business man; they affect you.

If our representative form of government is to be maintained, if the human needs of America's citizens are to be met, if personal freedom is to be preserved, these national problems must be properly solved.

They will not solve themselves.

Nor is it enough merely to turn them over to your elected representatives in Washington—and to hope for the best.

►What is needed is your active help—your interest, your thinking, your leadership—added to that of thousands of other business men who are working together, through the Chamber of Commerce of the United States, for the long-range good of America.

For information about Chamber membership, fill in and return coupon.

CHAMBER OF COMMERCE

A NATIONAL FEDERATION WORKING FOR GOOD CITIZENSHIP,



This map shows the location of its 3,100 affiliated organizations — local and state chambers of commerce and trade associations — through which the National Chamber operates in the local communities. Each of these organizations is made up of men who do things, who work for civic and business improvement, and for the good of the country. This is the secret back of the National Chamber's strength as a positive, forward-looking, action-getting institution.

Why the work of the Chamber is effective

The Chamber of Commerce of the United States represents *all* business, large and small, in all parts of the country.

- The Chamber is made up of many thousands of firms, corporations and individual business men *plus* 3,100 business organizations — local and state chambers of commerce and trade associations.
- As the spokesman for business — and in the public interest — the Chamber misses no opportunity to express to Congress and to the Administration the recommendations of business on national issues. The Chamber submitted to the First Session of the 83rd Congress specific recommendations on 37 legislative questions. (These recommendations are listed in a leaflet, "Congress Is Listening," a copy of which you may have on request.)
- The National Chamber functions not only in Washington but also back home. It carries on its educational and action-getting work in every county in the land. For instance:
 - (a) The Chamber's divisional and district staff members help local and state chambers and trade associations set up area and local meetings on national affairs and economic education. In the past ten months, more than 1,600 such meetings have been held.

OF THE UNITED STATES *Washington 6, D.C.*

GOOD GOVERNMENT AND GOOD BUSINESS

(b) The National Chamber helps local chambers set up and operate 2,500 active National Affairs Committees made up of members of local and state organizations. When Congress is in session, the Chamber sends these Committees its *Legislative Daily*, *Legislative Outlook* and Action Needed Letters — keeps them up to the minute on Washington developments.

- The National Chamber has wide research facilities unequaled by any other national organization for finding and analyzing the facts about economic trends and developments and national issues.
- As part of its educational work, the Chamber publishes hundreds of studies, reports and research papers. It also publishes 13 periodic newsletters and five regular publications, of which *Nation's Business* — the magazine you are reading — is the largest.
- The National Chamber has the counsel of more than 500 business leaders — each a recognized authority in his own field — who serve voluntarily on departmental and special committees. The Chamber's program is directed by a Board of Directors composed of 58 members, representing geographical divisions of the country and the various categories of business.
- The National Chamber is twice as large today as it was ten years ago, and has more than twice as much revenue with which to carry on its work. Annual budget is \$3,600,000; immediate goal is \$5,000,000.

Chamber of Commerce of the United States
Washington 6, D. C.

Please send information about membership.

NAME
TITLE
FIRM
STREET ADDRESS
CITY ZONE STATE

America's Finest Intercommunication



—brings new efficiency
to banks' operation

*Name and
interesting
details
on request

As an important part of its recent modernization program, a large Southern bank installed a complete system of Teletalk intercommunication. Now, Teletalk units at strategic locations put key personnel within instant voice-to-voice reach of each other. Officers get confidential information quickly from various departments over handset Teletalk units.

Increased operating efficiency and substantial time savings have resulted from installing Teletalk —America's Finest Intercommunication in point of style, performance and lasting value.



MODELS TO SUIT YOUR NEEDS



Teletalk comes in a wide variety of models to serve a broad range of needs—including yours, whether your business is large or small. Let your local dealer (see classified Yellow Pages) suggest the most economical Teletalk "hookup." Write us for free copy of booklet "Costs Drop."



WEBSTER W **ELECTRIC**
RACINE WISCONSIN

"Where Quality is a Responsibility and Fair Dealing an Obligation"
WEBSTER ELECTRIC COMPANY, RACINE, WISCONSIN • EST. 1909

Toll Road Boom

(Continued from page 82) Consulting engineers creating some business for themselves by getting eager-to-believe governors and legislators to establish separate road building commissions and by-passing the wiser heads in the highway departments.

Regardless of these dangers and the charges that toll roads are "a return to eighteenth century thinking" or "a conspiracy of the bankers to bankrupt the states" they are turning an increasing number of foes to friends.

Toll financing may even hold some promise for relieving the mounting woes of urban traffic. Cities could find themselves paralyzed one day, with traffic from intercity toll routes dumped at their doors. Extension of these turnpikes to carry and distribute traffic into the heart of the metropolitan district may be the answer. At least some experts think so. Already Chicago is studying a proposal to put toll booths at midpoint on two new city highways, the Congress and the Northwest Expressways.

The same underlying factors, responsible for rural toll roads, are present in urban areas and may well result in coin-in-the-slot highways for city commuters of the future.

In the absence of an abrupt stepping up of state motor vehicle taxes and concurrent greatly increased emphasis on improvement of the major trunkline highways, the rising public clamor for better roads seems sure to force either a vastly greater program of federal aid or a continued acceleration of toll road development. If federal spending is held down, as would seem likely, the situation will narrow down to a case of "no roads or toll roads" and, as Walter Carey, a trucking official, recently pointed out, speaking for the trucking industry, "In that choice there is no choice."

Emerson once wrote, "Why should you keep your head over your shoulder? Why drag about this corpse of your memory? Suppose you should contradict yourself: What then? Speak what you think today in words as hard as cannon balls, and tomorrow speak what tomorrow thinks in hard words again, though it contradict everything you say today."

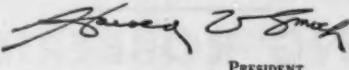
Many cannon ball words said against toll roads in the first half of our century are being supplanted by some hard talking in contradiction as the nation looks forward to the next 50 years.

END

A neighborly enterprise makes its Annual Report

IN EARLY TIMES before man had developed enterprises to provide security against loss by fire and other perils, the community-at-large lacked stability. Without a dependable system of insurance, the well-being of its merchants and citizens was constantly endangered by the hazards of chance and the threat of disaster.

Today, property insurance offers dependable financial security to the public. It is provided, in its most efficient form, by agents and brokers, independent businessmen in every community who are friends and neighbors as well as advisors to their policyholders. Behind its local representatives stand the strength and stability of The Home which has enjoyed the distinction of serving American property owners for more than a century.



PRESIDENT

Balance Sheet, December 31, 1953

ADMITTED ASSETS

United States Government Bonds	\$ 71,964,673.86
Other Bonds	90,970,307.64
Preferred and Common Stocks	150,854,115.00
Cash in Office, Banks and Trust Companies	35,909,076.68
Investment in The Home Indemnity Company	14,513,554.00
Real Estate	6,868,322.19
Agents' Balances or Uncollected Premiums, less than 90 days due	20,080,648.46
Other Admitted Assets	5,860,915.65
Total Admitted Assets	<u><u>\$397,021,613.48</u></u>

LIABILITIES

Reserve for Unearned Premiums	\$176,869,947.00
Unpaid Losses and Loss Expenses	34,806,349.36
Taxes Payable	7,550,000.00
Reserves for Reinsurance	1,457,663.89
Dividends Declared	2,000,000.00
Other Liabilities	4,973,203.10
Total Liabilities	<u><u>\$227,657,163.35</u></u>
Capital	20,000,000.00
Surplus	149,364,450.13
Surplus as Regards Policyholders	<u><u>\$169,364,450.13</u></u>
Total	<u><u>\$397,021,613.48</u></u>

NOTE: Bonds carried at \$5,752,632.57 amortized value and Cash \$82,500.00 in the above balance sheet are deposited as required by law. All securities have been valued in accordance with the requirements of the National Association of Insurance Commissioners. Based on December 31, 1953 Market Quotations for all bonds and stocks owned, the Total Admitted Assets would be \$396,941,878.98 and the Surplus as Regards Policyholders would be \$169,284,715.63.

★ THE HOME ★ Insurance Company

FIRE • AUTOMOBILE • MARINE

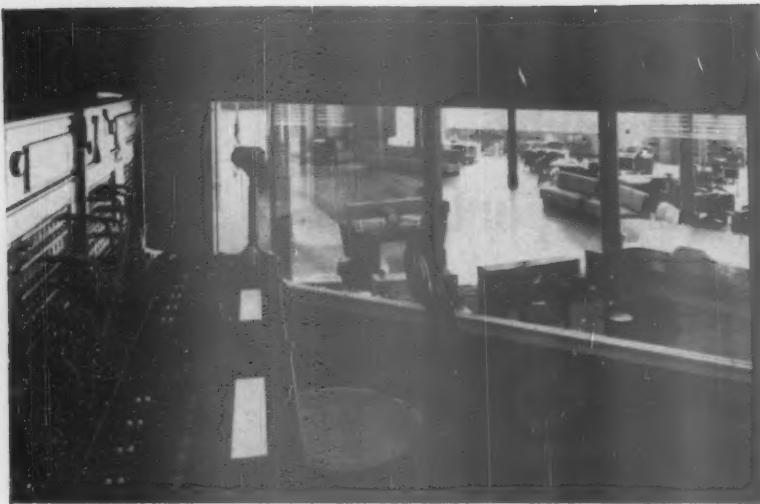
Home Office: 59 Maiden Lane, New York 8, N. Y.

Directors

LEWIS L. CLARKE <i>Barker</i>	HAROLD V. SMITH <i>President</i>
FREDERICK B. ADAMS <i>Chairman of Executive Committee, Atlantic Coast Line Railroad Co.</i>	ROBERT W. DOWLING <i>President, City Investing Co.</i>
GEORGE GUND <i>President, Cleveland Trust Co.</i>	HAROLD H. HELM <i>President, Chemical Bank & Trust Co.</i>
CHARLES A. LOUGHIN <i>Vice President & General Counsel</i>	IVAN ESCOTT <i>New York City</i>
PERCY C. MADEIRA, JR. <i>Chairman of Executive Committee, Traders Land Title Bank & Trust Co.</i>	EARL G. HARRISON <i>Schnader, Harrison, Segal & Lewis</i>
CHAMPION McDOWELL DAVIS <i>President, Atlantic Coast Line Railroad Co.</i>	WARREN S. JOHNSON <i>Investment Counselor, Peoples Savings Bank & Trust Co. of Wilmington, N. C.</i>
HENRY C. BRUNIE <i>President, Empire Trust Company</i>	BOYKIN C. WRIGHT <i>Shearman & Sterling & Wright</i>
HARBIN K. PARK <i>Chairman of Board, The First National Bank of Columbus, Ga.</i>	LEROT A. LINCOLN <i>Chairman of Board, Metropolitan Life Insurance Company</i>
THOMAS J. ROSS <i>Senior Partner, Ivy Lee and T. J. Ross</i>	HENRY C. VON ELM <i>Honorary Chairman of Board, Manufacturers Trust Company</i>
JOHN M. FRANKLIN <i>President, United States Lines Co.</i>	JOHN M. FRANKLIN <i>President, United States Lines Co.</i>
LOU R. CRANDALL <i>President, George A. Fuller Co.</i>	LOU R. CRANDALL <i>President, George A. Fuller Co.</i>
KENNETH E. BLACK <i>Vice President</i>	KENNETH E. BLACK <i>Vice President</i>
LEONARD PETERSON <i>Vice President & Controller</i>	LEONARD PETERSON <i>Vice President & Controller</i>
HERBERT A. PAYNE <i>Vice President & Secretary</i>	HERBERT A. PAYNE <i>Vice President & Secretary</i>
J. EDWARD MEYER <i>President, Cerd Meyer Development Company</i>	J. EDWARD MEYER <i>President, Cerd Meyer Development Company</i>
ARTHUR C. BABSON <i>Vice President, Babson's Reports, Inc.</i>	ARTHUR C. BABSON <i>Vice President, Babson's Reports, Inc.</i>



The Home Indemnity Company, an affiliate, writes Casualty Insurance, Fidelity and Surety Bonds



THIS IS A MIRROR FOR STOPPING ROBBERIES!

(For catching shoplifters and pickpockets, too)

L·O·F Mirropane*, The "See-Thru" Mirror, is a proved way of reducing theft losses to almost nothing. With bank robberies in the news, supermarket losses at 1% of sales, and variety store shop-lifting even higher, it will pay you to investigate L·O·F Mirropane for the added, realistic protection it offers. Many success stories available on request. Get all the facts from your L·O·F Glass Distributor or Dealer listed under "Glass" in the yellow pages of the phone book. Or write to Toledo.

®

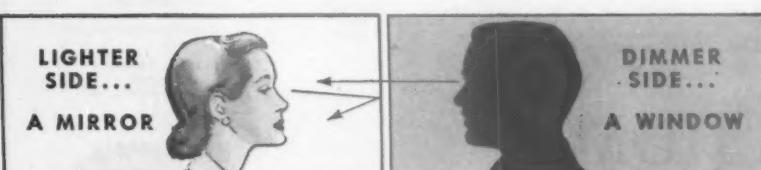


L·O·F Mirropane in Talman Savings and Loan Association, Chicago, encloses booth for telephone operator who can observe activity on the floor.

Liberty Mirror Division



LIBBEY·OWENS·FORD GLASS COMPANY
LM-234 NICHOLAS BLDG., TOLEDO 3, OHIO



MIRROPANE

The "See-Thru" Mirror

Letters to the Editor

(Continued from page 11)
creases were made upon the several designated effective dates and that it represents the maximum allowable increases, which were not always taken. Dr. Stevens estimates the over-all increase on bituminous coal has been about 52 per cent.

In any event, the bituminous coal industry has clearly not been subjected to 60 per cent increase in freight rates since 1939.

An average increase of 45.8 per cent on bituminous coal, according to our figures, or 52 per cent, according to Mr. Stevens' figures, is still modest in comparison with the increases from 1939 to date in some of our principal expense items.

These I feel would be in line with the general trend for all railroads:

1. Average cost of fuel coal purchased by Norfolk & Western increased from \$1.95 per ton for 1940 to \$5.79 per ton for the month of November, 1953, or an increase of 197 per cent.

2. Cost of treated cross ties increased from \$1.22 each in the year 1939 to \$3.58 in the year 1952, or an increase of 193.4 per cent.

3. Cost of steel rail increased from \$35.71 per net ton in 1939 to \$78.59 per net ton in the year 1952, or an increase of 120 per cent.

4. The cost of a 70 ton hopper car increased from \$2,915, which was the price paid to a manufacturer in 1941, to \$5,400 in 1953, which was actual cost in our own company shops, or an increase of 85.2 per cent.

5. The cost of a Y-6 heavy-duty Mallet freight locomotive built in our own shops increased from \$123,000 in 1940 to \$300,000 in 1951 (last one built), or an increase of 144 per cent.

6. Average hourly wage rate to all employees on the Norfolk & Western increased from \$0.7392 in 1940 to \$1.865 in July, 1953, or 152.4 per cent. For all railroads it increased from 74 cents in 1940 to \$1.97 in 1953 (partly estimated), or 156 per cent.

So it will be observed the freight rate increases on coal are well within reasonable limits when measured either by the increased prices of that product or the increased expense levels borne by the railroads in transporting it.

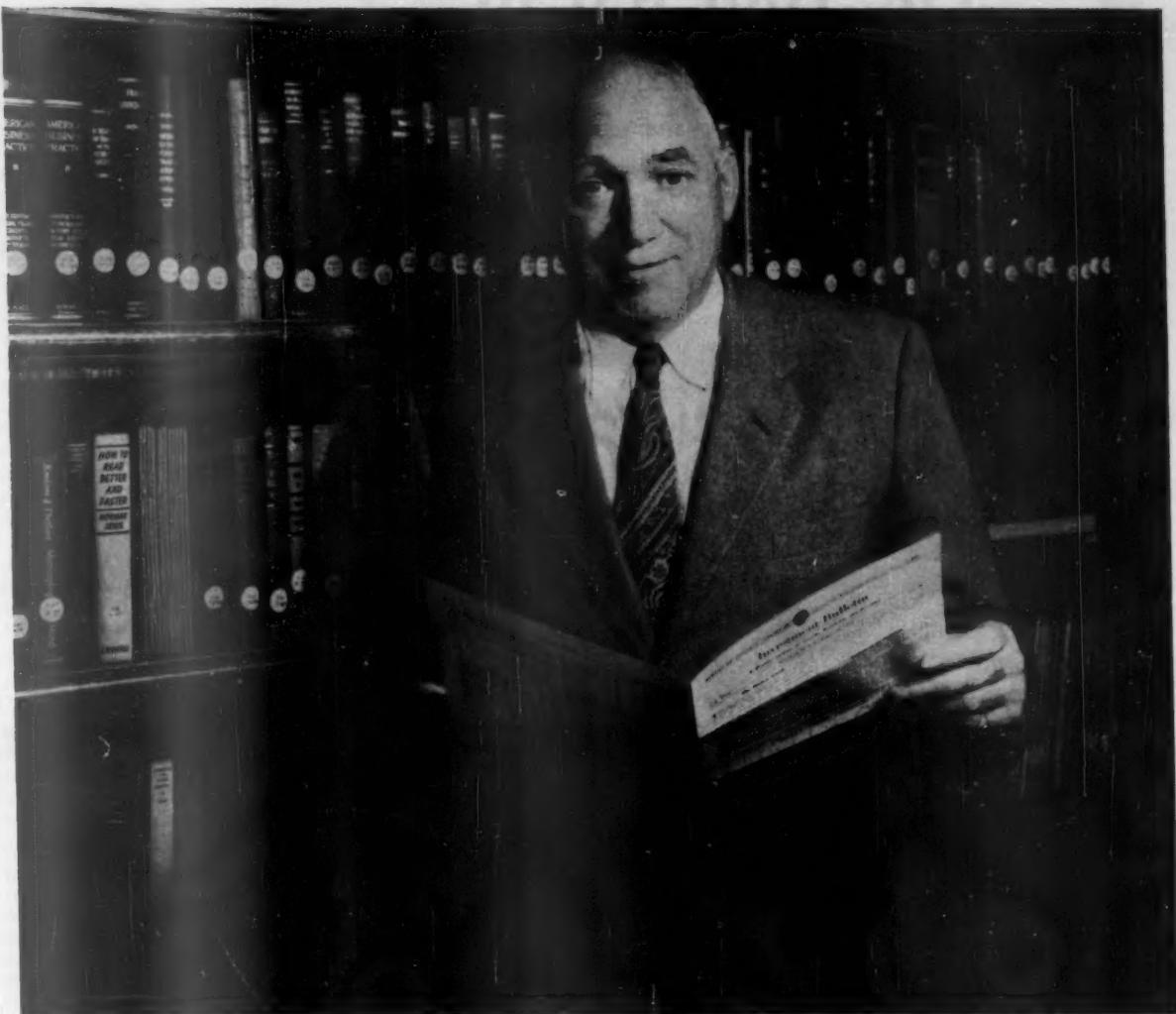
F. S. BAIRD
Vice President
Norfolk & Western Railway
Company

Cabbages and buckwheat cakes

Re Mr. Duffus' "By My Way" in December, I enjoyed it, as usual, but would like to comment on his surprise that "no poet has arisen to sing of cabbage patches as eloquently as poets have sung of fields of corn and wheat."

No poet has ever seen a field of cabbages waving in the sunlight like golden grain. And, from Oklahoma, "the corn is as high as an elephant's eye." I think it has something to do

“I read Nation’s Business...”



We advertise in Nation’s Business”

Ernest E. Jenks, Vice President, Chg. of Sales, Alexander Hamilton Institute

NATION’S BUSINESS IS READ BY MORE EXECUTIVES THAN ANY OTHER BUSINESS OR NEWS MAGAZINE

The roof fell in ...but our profits held up!

(Based on Company File #C-47-315)



Fire couldn't have knocked out our department store at a worse time. It was just before our big season . . .

Even now, no one can say how the fire started. And there was no stopping it. The blaze was put out only after the roof had fallen into the cellar.

The fire insurance money came through promptly. But materials

were scarce. We had trouble getting labor, too. So twelve months dragged by before we finished rebuilding.

Meanwhile, expenses kept piling up. We'd have been hard pressed without Business Interruption Insurance. *This insurance paid us almost \$200,000 for the year in which we had practically no other income!*

How much would a twelve-month shutdown like this cost you? Or even one of six months? Or three?

Whatever it is—if you have adequate Business Interruption Insurance—you won't have to worry about lost income.

When a peril insured against, be it fire, windstorm, explosion, riot or other disaster, shuts you down temporarily, Business Interruption Insurance covers your continuing expenses until you resume normal operation. And covers your anticipated profit as well!

For full information, see your Hartford Fire Insurance Company Agent or your insurance broker—now.

Year in and year out you'll do well with the

Hartford



Hartford Fire Insurance Company • Hartford Accident and Indemnity Company
Hartford Live Stock Insurance Company • Hartford 15, Connecticut

with height. But cabbages have had their due. As I recall, Edna Ferber gave them tender and loving reference in "So Big."

Although I hate to say it, I disbelieve he ever ate 20 buckwheat cakes at one sitting.

BILL GRAYDON
Los Angeles

Note: Mr. Duffus insists he did—but couldn't now.

Text for social economics

I teach senior social economics and have, for years, used NATION'S BUSINESS in my classroom with great success.

The magazine is always received with great satisfaction, but doubly so the January issue.

Your photographic study of the cabinet members is the finest thing of its kind I have ever seen. I cut my copy and assembled the pictures on the bulletin board.

WILLIAM R. BECK
Tillamook High School
Tillamook, Ore.

Old—but still good

Please send to me the April, 1944, edition of NATION'S BUSINESS. I am making a study of bank loans secured by Field Warehouse Receipts and am interested in the article by Mr. H. Bratter appearing in this issue.

L. P. TYBOR
Ass't. Vice President
Second National Bank of Houston
Houston, Texas

Farm parity

Under your "Management's Washington Letter" you had an item on farm parity ratios facing governmental overhaul. I don't believe you have gone quite far enough. Farm equipment in the 1910-1914 period would consist of maybe six horses, a binder that cost about \$125, a drill that cost maybe \$100, a plow that would cost about \$85, and other tools and equipment of the same kind.

Usually the farmer would raise some colts and had a spread of horses to sell about every year.

At present a combine will cost about \$6,000, a tractor will cost about \$4,000, and other machinery will probably cost a farmer \$5,000 more. So to operate a farm today a farmer needs to invest from \$15,000 to \$20,000. It is true that he can save labor by using this machinery, but I know it takes about all the money the average farmer can make to keep himself up to date with his machinery. So where the farmer can save materially on labor, his overhead costs are as big as they ever were or bigger. So I don't see why there is any justification in bringing down the parity on farming operations.

C. A. DRAEGER
Aberdeen, S. D.

Waterways' Load: Biggest in History

(Continued from page 37)

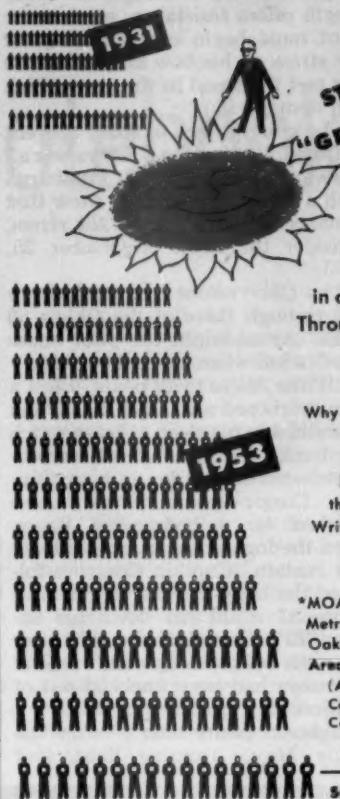
towboat is the best that can be had. Most of the cooks are Negroes and wizards with a skillet. The Rev. Archie Cosey of the *Cherrystone*, for instance, is an ordained Spiritualist minister and could hold his own as a cook in any fine restaurant. If he errs at all, the preacher errs on the side of solicitude—he cannot understand a man on a diet and teases him until he has eaten his fill.

A curious sort of cooperation keeps the operation of the towboats at a prideful peak. Tom Jordan, of the Jordan River Lines, for instance, was the first to think of an engine room painted white. He was jeered at, until other boat owners realized that white reflected the slightest grease smear, and an engineer or oiler interested in his job would automatically pull the rag out of his hip pocket and clean up.

It is in the day-by-day operation of the tow—the enormous load to be moved, the crew and its pride in its boat, the skill of the pilot—that the full drama of waterways transportation comes to life. The *Cherrystone*, with her 9,000 tons of oil for Pittsburgh, has been mentioned as an example. Seen from the shore, she is a ridiculous little boat nosing four unwieldy barges against a current. Aboard she is a marvel of maneuverability and her pilot house is the center of action which changes with every bend in the stream.

These tows, with a good pilot at the controls, have amazing maneuverability. On the Ohio, for instance, the *Cherrystone*'s tow of slightly less than 1,000 feet must be broken for each of 53 locks. The two forward barges are made fast to the lock's walls and the other two, with the *Cherrystone*, are ranged alongside. This would seem to require a great deal of backing; actually, the pilot uses rudders and wheels to make the after half of his tow sidestep, and accomplishes the whole maneuver—entrance into lock, breaking of tow, reassembly of tow and procedure up river—in about 40 minutes.

On the Mississippi the pilot's problems are compounded. His is what they call an integrated tow. The barges fore and aft have spoon-bills, designed to offer minimum resistance to the water in front and in back. The center barges are boxes. The whole is tied together with a system of pins and cables, presenting a single unit of about 1,000 feet. Since there is no space between



ST. REGIS PAPER IS
"GROWING PLACES" IN MOA*

Here's proof that branch plants located in MOA "grow places" fast: Manufacturing in the West Coast branch plant of the St. Regis Paper Company began in 1931 in a 15,000 square foot area with 45 employees. Through consistent and sound expansion, St. Regis Paper today operates a plant of 70,000 square feet with 225 employees.

Why growing industry chose MOA is reported factually in the new, Free Factfile. Climate, distribution, markets, living conditions, etc., are discussed in informative detail. If your business is considering a branch plant—now or in the future—such material in your files will be very helpful. Write today, your request will be given complete confidence.

Metropolitan
Oakland
Area

*MOA means
Metropolitan
Oakland
Area
(Alameda
County,
California)

ALAMEDA
ALBANY
BERKELEY
EMERYVILLE
HAYWARD
LIVERMORE
OAKLAND
PIEDMONT
PLEASANTON
SAN LEANDRO
RURAL ALAMEDA COUNTY

CALIFORNIA

5423
Suite 203 • 427-13th Street • Oakland 12, California

WILL YOU SMOKE MY NEW KIND OF PIPE 30 Days at My Risk?

By E. A. CAREY

All I want is your name so I can write and tell you why I'm willing to send you my pipe for 30 days smoking without a cent of risk on your part.

My new pipe is not a new model, not a new style, not a new gadget, not an improvement on old style pipes. It is the first pipe in the world to use an ENTIRELY NEW PRINCIPLE for giving unadulterated pleasure to pipe smokers.

I've been a pipe smoker for 30 years—always looking for the ideal pipe—buying all the disappointing gadgets—never finding a single, solitary pipe that would smoke hour after hour, day after day, without bitterness, bite, or sludge.

With considerable doubt, I decided to work out something for myself. After months of experimenting and scores of disappointments, suddenly, almost by accident, I discovered how to harness four great natural laws to give me everything I wanted in a pipe. It didn't require any "breaking in". From the first puff it smoked cool—it smoked mild. It smoked right down to the last bit of tobacco without bite. It never has to be "rested". AND it **never has to be cleaned!** Yet it is utterly impossible for goo or sludge to reach your tongue, because my invention dissipates the goo as it forms!

You might expect all this to require a complicated mechanical gadget, but when you see it, the most surprising thing will be that I've done all this in a pipe that looks like any of the finest conventional pipes.



The claims I could make for this new principle in tobacco enjoyment are so spectacular that no pipe smoker would believe them. So, since "seeing is believing", I also say "Smoking is convincing" and I want to send you one Carey pipe to smoke 30 days at my risk. At the end of that time, if you're willing to give up your Carey Pipe, simply break it to bits—and return it to me—the trial has cost you nothing.

Please send me your name today. The coupon or a postal card will do. I'll send you absolutely free my complete trial offer so you can decide for yourself whether or not my pipe-smoking friends are right when they say the Carey Pipe is the greatest smoking invention ever patented. Send your name today. As one pipe smoker to another, I'll guarantee you the surprise of your life, FREE. Write E. A. Carey, 1920 Sunnyside Ave., Dept. 943, Chicago 46, Illinois

**E. A. CAREY, 1920 Sunnyside Ave.,
DEPT. 943, CHICAGO 46, ILLINOIS**

Please send facts about the Carey Pipe. Then I will decide if I want to try it for 30 Days at YOUR RISK. Everything you send is free. No salesman is to call.

Name _____

Address _____

City _____ Zone _____ State _____



**...OF THE WORLD'S LARGEST
SELLING GUMMED TAPE**

SUPPLE-IZING® cracks the adhesive into millions of tiny crevices so water will soak in swiftly. The adhesive softens instantaneously and penetrates deeper... let's Orange Core tape adapt itself easily to "soft" and irregular packages with minimum rubbing. Supple-izing also keeps Orange Core pliable... makes it easy to handle. All these benefits cost nothing extra... you get Orange Core for no more than ordinary standard tapes. You really have to try Orange Core to believe its wonderful performance. Send for a free trial roll.

ORANGE CORE

GUMMED SEALING TAPE

SUPPLE-IZED®

© "Supple-ized" is copyrighted.

WORLD'S LARGEST SELLING TAPE

Tear out this advertisement and clip it to your letterhead for a FREE trial offer of Orange Core. Mail to: Hudson Pulp & Paper Corp., Dept. NB-3, 505 Park Ave., New York 22, NY.

For Over 50 Years

MOLINE "Hole-Hog"

Specially Designed MACHINE TOOLS have cut production costs for American Industry

MOLINE TOOL CO. Moline, Illinois

**• CLOSEOUT • BANKRUPT
• SURPLUS • OVERSTOCK**

Merchandise Offerings of Every Conceivable Type & Category! (Toys, jewelry, books, household goods, hardware, machinery, raw materials, etc.) Every other WEEK by FIRST CLASS MAIL to: **JOBBERS . . . RETAILERS . . . BUYERS . . . SALESMEN**

This confidential national weekly bulletin is the FIRST of its kind ever offered. Offers EXCLUSIVE offerings that are HARD TO FIND—at a cost to you no less than 40¢ per week! Scores of choice merchandise offerings for SMALL LOT BUYERS as well as for QUANTITY BUYERS. ONE good buy a month can pay you for the entire subscription cost! Buys as low as 5¢, 10¢ on the retail dollar price—BLOWN AWAY PRICES, TWO! This confidential weekly JOB LOT BULLETIN listing scores of terrific offerings will MAKE YOU MONEY as nothing else will—at a time when this type of EASILY SALARABLE merchandise is MOST IN DEMAND EVERYWHERE. TRIAL 12 issues, \$7.00; 24 issues, \$12.50; 52 issues, \$20.00. Check with order, please. YOUR MONEY INSTANTLY RETURNED IF NOT FULL if the FIRST issue you receive doesn't please you!

TOWER PRESS, INC.
P. O. Box 591-TC, LYNN, MASS.

barge for water to escape, the entire length offers resistance, so that the pilot must begin compensating for the stress on his bow long before he has met the trend in the river which will demand it.

Stark limitations of space prevent us from following the *Cherrystone* all the way from Houston to Pittsburgh with a load of oil. But to show that romance is NOT dead on the rivers, consider the night of October 25, 1953.

The *Cherrystone* had worked her tow through three of the Ohio's 53 locks. At midnight the pilot house was hushed when the radio said:

"Willie Mayo to all boats. I lost a man overboard near Lock 52. Think he walked in his sleep. Please watch the banks for him." Both searchlights went on and for an hour Captain Cosgrove and Pilot Lowe watched for a bedraggled figure. Then the fog socked in, as suddenly as a curtain. Captain Cosgrove followed the buoy-marked channel but before he could cut down his engines "Li'l Cherrybelle," as the crew knows its boat, was aground. One of the buoys had been knocked out of position.

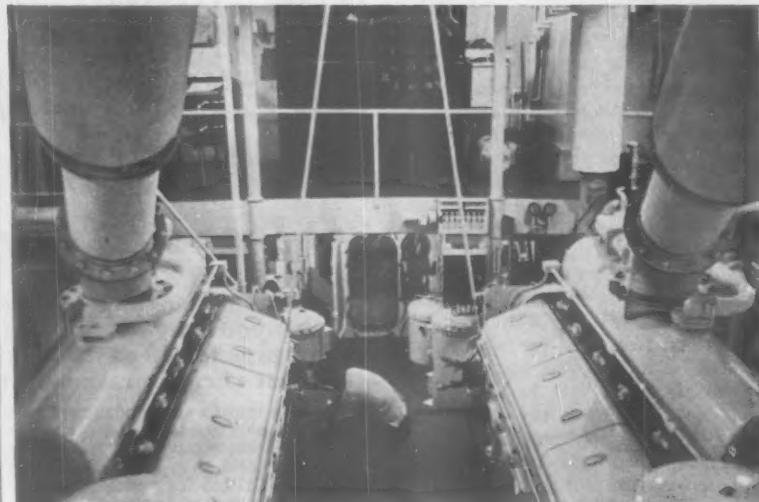
Eighteen hours later—after the *Willie Mayo*, running light, had

commerce from everywhere. The barges, running regularly to Minneapolis-St. Paul (1,800 miles), Pittsburgh (1,596), Kansas City (1,550), and St. Louis (1,000) carry the South's products north—cotton, oil, paper and wood products, sulphur and other chemicals. They bring back grain from the Central States, dairy products from Wisconsin and Minnesota, iron and steel from Chicago and the Ohio Valley, coal from the Ohio and the Kanawha valleys, automobiles from Detroit.

What this means, in sheer bulk, is to be found in the records of the Army Engineers. In the war period, for instance, the peak year was 1944, with a total of 20,382,000,000 ton miles. There was a slump in 1945 and 1946. In 1947 the system carried cargoes totaling 23,479,000,000 ton miles—and in 1953 a total of slightly more than 33,000,000,000 ton miles.

The figures in the billions are what the men with the slide rules like to contemplate. But the men on the boats, while aware of their importance in shoving 10,000 ton cargoes upstream, still live a little in the Mark Twain era.

They like to remember the race of the *Robert E. Lee* and the *Natchez*.



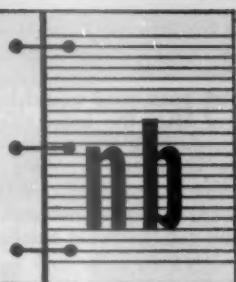
White paint in the *Cherrystone*'s engine room encourages cleanliness

passed upstream and returned in a futile search for its crewman, and the lock tender at 51 had reported a barge sunk in the western entrance—the *Cherrystone* was wrenched clear, with the aid of a big steam-towboat, the *H. A. Bayless* of the American Barge Lines. (Such aid, by the way, has nothing to do with salvage; it is freely offered.)

Because of the barges, New Orleans has become a port perhaps unique in all the world. It is the hub with a spoke radiation bringing it

and they like to remind you that the *Sprague*, a steam sternwheeler affectionately known as "Big Mama," pushed 67,000 tons of coal in 60 barges away back in 1907, to set a record that still stands.

When they do so, there is a wistfulness in it. Captain Cosgrove is an old packet-boat man, although he is as modern as any pilot on the river. But you get the feeling he is looking to the day when there will be diesel towboats able to break the record of the Big Mama. **END**



nb notebook

Hard hats for safety

MIKE Sikurenic, a slagger at the Bethlehem Steel plant in Johnstown, Pa., has become the two hundredth member of the Turtle Club. The fact that he was alive to accept the award at the meeting of the National Safety Congress demonstrated his right to receive it.

Members of the Turtle Club—motto: "Shell on head—we're not dead"—are accident victims who would have been killed had they not been wearing hard hats at the time of their mishaps. Those accepted for membership receive certificates, a new hard hat with the Turtle Club insignia and a small turtle lapel pin, official club insignia.

According to safety engineers some 15,000,000 workers in this country are, or should be, wearing the hard hats to which club members owe their lives.

Fallen leaves mean cash

CITY officials of Newburgh, N. Y., report two new sources of municipal revenue. They have found that farmers will pay for leaves that the city has to remove from the streets. They use them as fertilizer. The town also sells old concrete, asphalt and other road-repairing materials to contractors who use it for fill.

Now officials are studying the possibility that wood and brush removed from city parks may be marketable as wood chips.

A college for trout

AT THE state trout hatchery in Oden, Mich., a team of professional psychologists is offering a college education to game fish which, they hope, will qualify the students for the degree "Master of Survival."

Need for the course became evident to fishermen and others who found that hatchery-raised trout, because of their background, lacked the cunning which makes the wild trout a wily and elusive opponent for fishermen. Hatchery trout learn to associate the appearance of people with food thrown on the water and rise trustingly to the surface. They

are easy victims for the scientific fisherman's well cast fly.

To meet this need, members of the Izaak Walton League and others interested in conservation and sportsmanship have been splashing through the likely pools before the fishing season opens, trying to scare the fish into an awareness of danger from people.

If Oden's plan works, these people can keep their feet dry. In the hatchery survival course, which continues for two months, the trout are fed through underwater vents which scatter the food on the bottom. Those which rise to the surface get a sharp electric shock from a device the instructors carry. Soon sight or sound of a person sends them darting to the bottom.

The stork in partnership

EDWARDS BROTHERS, Inc., who are lithographers of Ann Arbor, Mich., have solved the old problem: What to do when trained women workers stop work to have babies?

They have taken the stork into virtual partnership through an arrangement by which women who are forced to leave because of pregnancy go right on working at home.

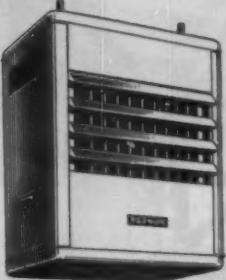
Much of the work in the firm's composition department is done by skilled typists using expensive equipment. Training of new operators is expensive and takes much time.

So the firm bought additional machines. Now, when a girl enrolled in the program leaves to have a baby, a machine is moved into her home.

Study shows that, in spite of investment in additional machines, overhead has been reduced, quality of composition has held up and even speed has increased. As a result, the firm has been able to reduce rates on composition.

The girls—15 so far—who have been working under the system like it, too. It permits them to continue earning at a time when added income is important. The basic system is built around 40 hours work per week, but paid on a piecework basis. Some home workers have done their scheduled amount of work in 30 hours and asked for more—a request

SPOT HEAT



For the small
store or the large factory —

- Low in Cost
- Completely Automatic
- Saves Valuable Floor Space

REZNOR
THE WORLD'S LARGEST-SELLING
GAS UNIT **HEATERS**

REZNOR MANUFACTURING CO.
23 Union St. Mercer, Pa.
I want more details on the world's most
popular gas unit heater. Please send my
free copy of Bulletin GN-S34.
Name _____
Company _____
Street _____
City _____ State _____

TIFFANY STANDS ESPECIALLY DESIGNED

FOR TODAY'S OFFICES



and

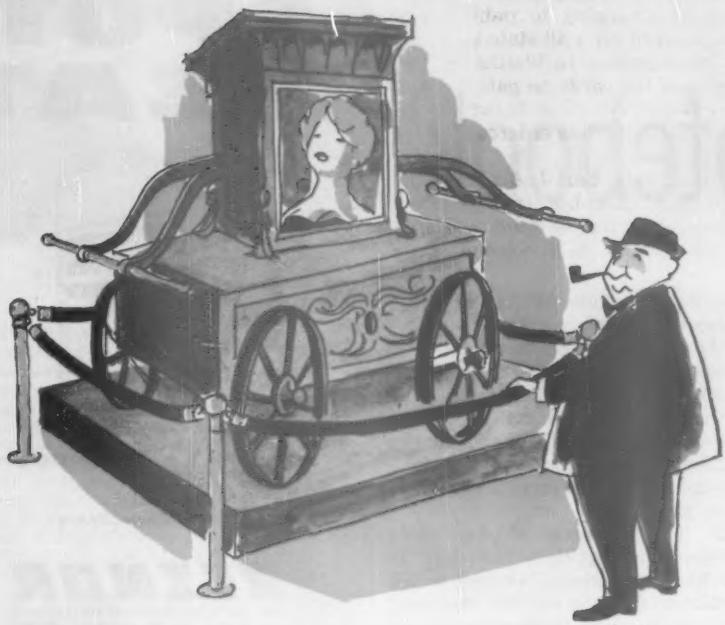
TODAY'S OFFICE MACHINES

Tiffany's many unique features and
sturdy all-steel construction make it
first choice of office workers and
management everywhere. Tiffany
Stands are precision engi-
neered to give years of
trouble-free service.
Literature on request.

ON SALE AT
BETTER
DEALERS
EVERWHERE

7350 FORSYTH • ST. LOUIS 5, MO.

TIFFANY STAND CO.



Pete Progress, and the old smoke-eater

How'd you like to bite your nails waiting for this relic to come wheezing up to your burning home? Nope, you sure wouldn't. Here is the place it belongs, right in this museum. Fortunately, most every town is well protected, thanks to fore-sighted public officials and active civic groups like your chamber of commerce.

But no matter how new or efficient your community's apparatus, it can't beat fire prevention right in your own home or place of business. Take a look around. Got enough exits? Any old rags lying around? Inflammables in a safe place? If you want to know how to control or eliminate fire hazards, just ask your chamber of commerce. They'll be happy to give you the information.



Pete Progress speaks for your chamber of commerce, an organization dedicated to making your community a safer, healthier, pleasanter place to live and work. Every project backed by the chamber is a boost for the community.

You can help, too—and active support of your chamber will help you

which the firm has to refuse because of complications with wage and hour laws.

Many girls, who would have quit working after the baby came, continue to work at home and—an even further dividend—many girls who had previously left the plant because they were needed at home have been re-employed through this arrangement.

Dog zoning

WHEN does a puppy become a dog—and how many dogs make a kennel?

To most people such questions may seem to fall in the category of the old "how high is up?" conversational gambit—but not to city officials who have to draft zoning ordinances designed to keep residential districts from becoming commercial.

If old Tray is properly licensed, city officials do not deny her right to have puppies. But suppose her owner sells these pups? When does he cease to be a pet-owner and become a kennel operator?

The American Society of Planning Officials says that at least four communities—Muskegon, Mich.; Salt Lake county, Utah; Los Angeles and Los Angeles county, Calif.—agree that a puppy becomes a dog at four months. (People who have tried to housebreak a pup may doubt that.) In other places, where a dog is not so definitely defined, the designation presumably follows the licensing practice, which ranges from four to eight months.

Many communities also rule that pups, exceeding four in number, must be removed from the home at maturity—a provision that helps prevent the difficulties that might come from permitting a number of dogs, even though not for sale, from running around unpenned.

So far, apparently, cats have escaped the strict limitations that zoning ordinances provide for dogs.

Printed prayer

WHEN the Rev. William R. Fairman, pastor of St. John's Evangelical Church at Mamaroneck, N. Y., said grace before dining with his family in a public restaurant a few months ago, other patrons watched with more than casual interest. This gave the clergyman an idea.

Now more and more restaurant proprietors are putting cards carrying printed graces in three faiths on their tables. Clients have accepted the innovation so enthusiastically that managers say the cards will become a fixture.

The Layman's National Commit-

for any building job!

... use

FIR PLYWOOD

Large, light, strong, real wood panels save time and labor on maintenance or new construction. A type and grade for every need. For 1954 catalog, write (USA only) Douglas Fir Plywood Association, Tacoma 2, Wash. Or see your lumber dealer today!

Buy Only DFPA-Grademarked Panels



The OFFICE VALET® Lockerette

Checkers®
Commercial, industrial and institutional wardrobe equipment and checkrooms.

VALET RACKS
Stationary and portable Wardrobe and Locker Racks for the office and home.
Write for Catalog
OL-60

VOGEL-PETERSON CO.
1121 West 37th Street • Chicago 9, U.S.A.

Prints Postal Cards!

FREE Use on 30 Day Trial!
Send name today for facts and **FREE** Illustrated Book of unique advertising plans and money-making ideas for your business. Learn how others are boosting sales with post card ads... easy with Cardmaster.

Cardmaster Co., 1920 Sunnyside, Dept. 2443, Chicago 40, Ill.



GET MORE SHELF SPACE with CURMANCO LETTER RACKS!

Saves time... Invites action... Clears your desk. Handles, Sorts, Classifies, Distributes work. Electrically welded in one piece. Olive, Green, Brown, Gray.

Letter size... \$7.50. Legal size... \$9.50. Add 75¢ if prepaid. Send check or M.O.

CURRIER MFG. CO., St. Paul 8, Minn.

OVER 300 WAYS TO SAVE \$

ON YOUR STATIONERY & OFFICE SUPPLIES! Typical savings: 10 rolls of No. 600 clear Scotch Tape (1/4" x 250') guaranteed fresh stock at almost the gross price (\$1.16 per roll, FOB: Our Door). You save as much as \$2.00 per dozen. WRITE TODAY for our **FREE** Spring catalog. See how you can effect tremendous savings on all your office needs!

J. J. LESTER & CO., INC., 25 W. 44th St., New York 36

"The cut-price... one-price mail order stationers"

tee, Inc., a nonsectarian organization, is arranging to publicize the prayer card on a 48 state basis.

One hospital—in Waltham, Mass.—placed the cards on patients' food trays and received such enthusiastic response that it has ordered a special printing.

Meanwhile, Earl J. Arnold, of the Waltham Chamber of Commerce, has volunteered to send a sample card to anyone in the country who requests it.

Project of mercy

ONE midwinter day three years ago the Rocky Ford, Colo., Chamber of Commerce received an emergency request for watermelons. A young boy in Gainesville, Texas, critically ill with nephritis, kept crying for watermelon.

It was natural that the request be made to Rocky Ford. The town is famous in Colorado for its Watermelon Day each September when tons of locally grown melons are given away.

But watermelons in winter were another matter. Ted Chenault, chamber of commerce manager, finally located a few farm wives who had frozen watermelon for their own consumption. They gladly donated some, and they were flown to the boy in Texas.

Out of this incident was born Rocky Ford's Watermelon Bank, maintained by the chamber as an emergency store of melons for the critically ill. People suffering from some types of abdominal and kidney ailments often develop an intense craving for this food.

"Our purpose is to provide these suffering people with something that they desire when it is not available elsewhere," Mr. Chenault says.

The bank has become a community-wide project of mercy in Rocky Ford.

Each September growers donate the melons and Boy Scouts cut them and remove the hearts. These are packaged in quart containers, frozen and kept in space donated by the local cold storage plant. The Rocky Ford Cooperative Creamery donates the packaging and dry ice used for shipping. Last September the meat from more than 100 melons (Rocky Ford melons are huge) was frozen and stored.

In the past two years Rocky Ford has filled 42 emergency requests for out-of-season melons from Texas, Arizona, California, Washington, Louisiana, Kansas, Nebraska and Colorado. The average cost per shipment, about \$3.25 for postage, is borne by the chamber of commerce.

Photorapid
makes perfect copies in seconds!



SIMPLE—This newest development in photocopy machines, now available in one compact unit, 16 1/4" x 23 1/4" overall, with only one knob to turn, can be operated easily by any girl in your office.

HANDSOME—Glossy black with white trim—looks well anywhere.

ACCURATE—No matter how fine the detail, or what the colors, if you can see it in the original you will see it in the photocopy.

VERSATILE—Produces exact, letter-perfect copies up to 14" wide—whether the original is single or double sided, opaque or translucent, white or colored. Photorapid's legally accepted copies are ready for instant use, eliminating costly typing, hand copying and checking—or costly outside copying. With Photorapid you can make single side copies, double side (to reduce filing space), transparent copies for use as masters with diazo or blueprints, tissue copies for air mail—all at an unbelievably low cost. Also two-part models for copying from books without removing or injuring pages.

FAST—In seconds your finished, perfect copy is ready.

Write for details

copy-craft

Dept. N-3, 105 Chambers St., New York 7, N.Y.

UNIQUE ADVANTAGES

Closed tight when not in use—solution keeps longer. Non-metallic construction prevents corrosion.

For Only \$5, You Can TRY BARRON'S FOR 17 WEEKS to help your money grow

Here is a way to discover, at low cost, how Barron's National Business and Financial Weekly gives you complete financial and investment guidance—the equivalent of numerous special services that cost much more. A trial subscription—17 weeks for only \$5—brings you:

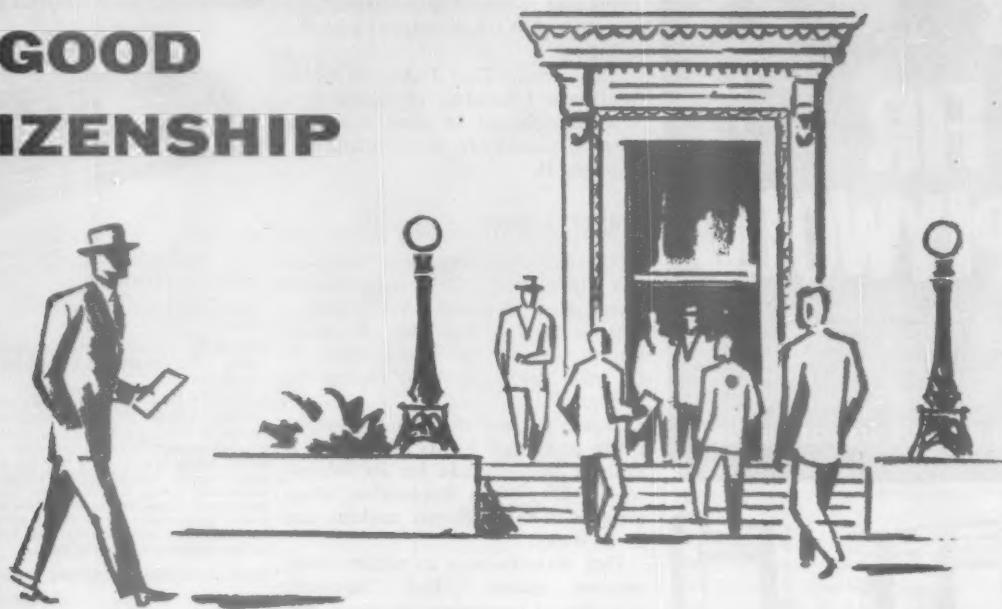
Everything you need to know to help you handle your business and investment affairs with greater understanding and foresight... the investment implications of current political and economic events, and corporate activities... the perspective you must have to anticipate trends and grasp profitable investment opportunities... the knowledge of underlying trends, immediate outlook, vital news and statistics, which indicate real values of securities. Compactly edited to conserve your time, yet keep you profitably informed.

No other publication is like Barron's. It is the only weekly affiliated with Dow Jones, and has full use of Dow Jones' vast, specialized information in serving you.

Try Barron's and see for yourself how this complete weekly financial news service gives you money-making, protective information you need in managing your business and investments wisely, profitably, in the eventful weeks ahead.

Only \$5 for 17 weeks' trial; full year's subscription only \$15. Just send this ad today with your check; or tell us to bill you. Barron's National Business and Financial Weekly, 40 New Street, New York 4, New York. NB-354

FIRST REQUISITE OF GOOD CITIZENSHIP



"THE first requisite of a good citizen in this Republic of ours is that he shall be able and willing to pull his own weight."

The country has changed greatly since Theodore Roosevelt made that statement in 1902. Only a few people heard him say it. Those who did arrived by foot, by carriage or, perhaps, by streetcar. No radio carried his voice to every living room in the land. No television put his image before the public.

In those days the words of statesmen were spread by telegraph keys clicking Morse code to newspapers whose readers were mostly male. Although the standard working day was long, men still had more time for reading than women; and men alone had the ballot which empowered them to act on what they read.

The mechanics of living have been greatly simplified in the intervening years. Men—and women, too—freed from drudgery, have more time to read, to form opinions and to act on them.

As the physical world has changed since 1902 so have our attitudes.

To those who heard Teddy speak—and to those who later read his words—the idea of "pulling one's weight" was almost a cliche. In those days, one got ahead by doing the best he could. Hard work, thrift, ability, all the copybook virtues were accepted as keys to a happy and prosperous life.

It has not always been so since.

Through the years the idea developed that those who could not or would not pull their weight might be our chosen people. We began to talk of security and to demand that government or somebody insure it for us.

Those who spoke of weight-pulling, or thrift—even

of liberty—were ridiculed as malcontents out of step with the new day. Such people were damned as putting property rights above human rights, an argument which overlooked the fact that human rights without property rights are pretty pointless—as any man could find out who attempted to live a full life without a vested interest in a pair of trousers.

It overlooked, too, the point that the security everybody wanted was based entirely on the production and consumption of things.

And these factors depend on men willing to pull their weight.

A world war demonstrated that security rested on the same base.

But the criers after security remain unconvinced.

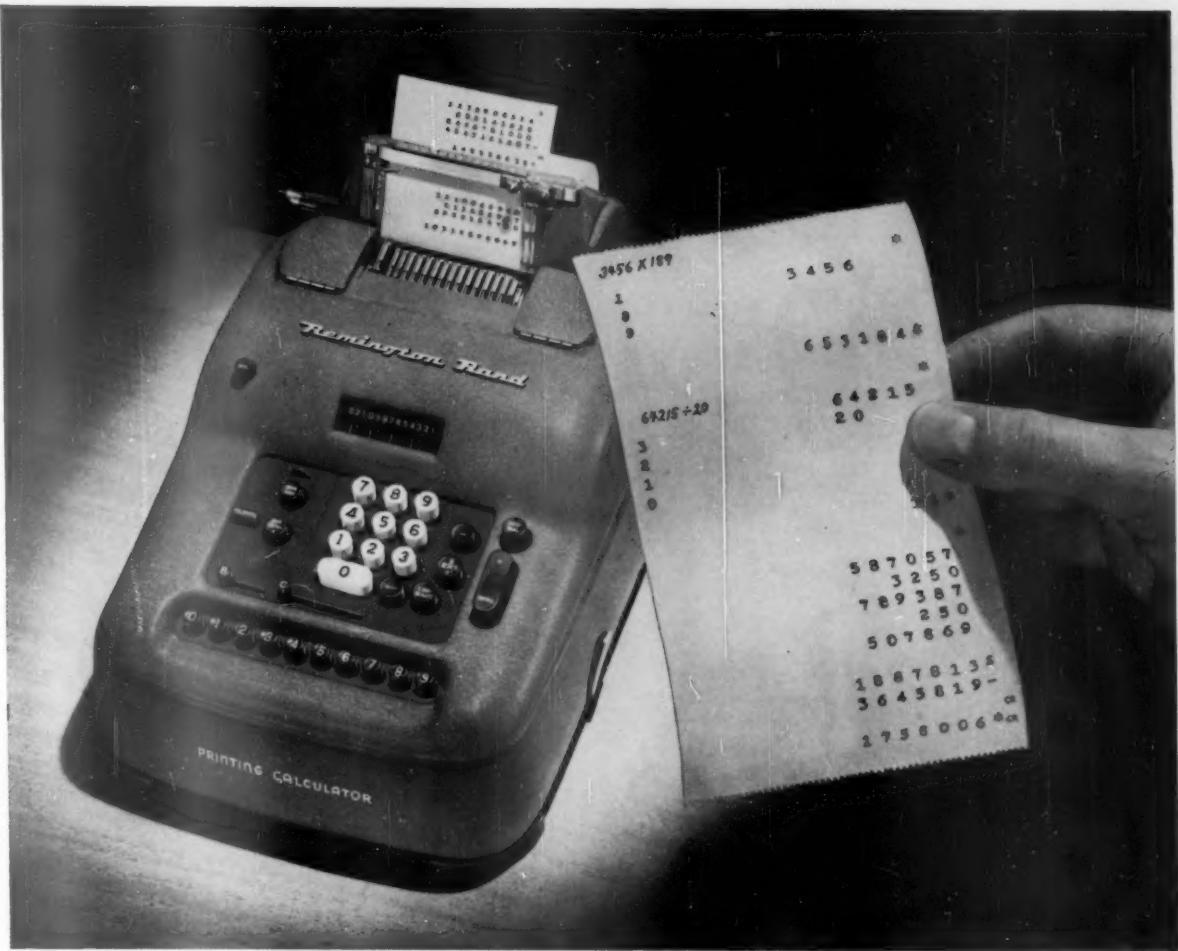
Today they fear security is threatened by "recession." They see it threatened by changes in labor laws, changes in social security, changes in tax laws.

Meanwhile good citizens able and willing to pull their own weight are gladly giving time from their own jobs of production to counsel with government and each other as to the best ways of providing security, not by dividing what we have but by providing enough that every man may have a share.

Some 3,500 of them will meet in Washington April 26, 27, 28 with this purpose in mind.

They will attend the Forty-second Annual Meeting of the Chamber of Commerce of the United States. Here—their practical experience fortified by the opinions of leaders of economics, science, psychology—they will discuss with government leaders and others the path that will lead to the only true security this country—or any country—can ever enjoy:

Good citizenship—good government—good business.



Now—get all your answers automatically!

WITH THE NEW, FULLY AUTOMATIC, REMINGTON RAND PRINTING CALCULATOR

This new, performance-packed printing calculator multiplies, divides, adds and subtracts amounts up to ten trillion. It prints and proves every calculation on the tape. It is the *first* fully automatic printing calculator with all these features:

Simpla-tape...printed proof in black and red with all the essential elements, no superfluous figures.

Automatic multiplication...fully automatic short-cut multiplication with push-button ease.

Automatic division...one key to all your answers.

Automatic credit balances...minus totals distinctively signalled as credit balances.

10-key touch addition and subtraction...effortless speed through simplified touch operation.

Constant key...Remington Rand's exclusive multiplication "memory" feature.

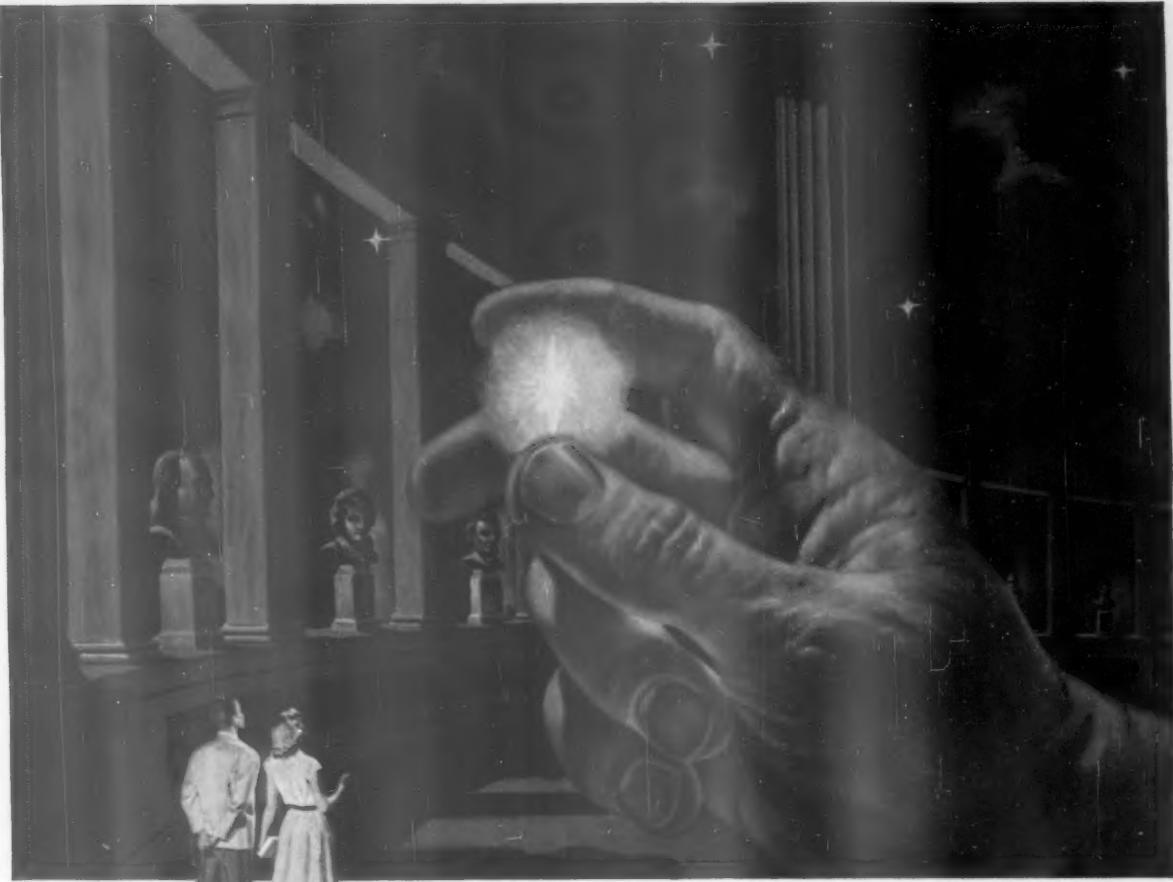
Automatic total control...for individual or accumulative totals, automatically.

Two-color ribbon...totals, subtotals and credit balances printed in standout red.



FREE! Ask your Remington Rand Representative for an eye-opening demonstration, or send for your copy of this "show how" folder. Write Remington Rand, Room 1846, today. Ask for C669.

Remington Rand PROFIT-BUILDING IDEAS FOR BUSINESS • 315 FOURTH AVENUE, NEW YORK 10, N. Y.



Spark of genius

"The great objective...
is to open the avenue of scientific knowledge to youth"*

Franklin...Fulton...Lincoln...Bell...Willard—geniuses? Yes, in the sense that they had the creative spark and the ability, courage, and leadership to see and speed to us inventions and ideas beyond the horizon of their day.

FUTURE IN TODAY'S YOUTH—The scientists, statesmen, inventors, and humanitarians of tomorrow are among our youth of today. The future depends upon our discovering, fostering and using their creative genius.

OPPORTUNITIES ABOUND for all of us "to direct the genius and resources of our country to useful improvements, to the sciences, the arts, education . . ."

SCHOLARSHIPS AND FELLOWSHIPS—To help meet this need, Union Carbide has established undergraduate scholarship and fellowship programs in a number of

liberal arts colleges and technical institutions to assist deserving students who are interested in business and scientific careers.

THE PEOPLE OF UCC hope you, too, will do everything in your power to discover and encourage the creative talent of our American youth. In them is our greatest assurance of an ever better tomorrow.

TO LEARN MORE about the Union Carbide scholarships and fellowships, their purposes, and the colleges and universities in which they have been established, write for booklet A.

*from Tablets in the Hall of Fame, New York University.

UNION CARBIDE
AND CARBON CORPORATION
30 EAST 42ND STREET  NEW YORK 17, N. Y.

UCC's Trade-marked Products include

LINDE Oxygen

PREST-O-LITE Acetylene

SYNTHETIC ORGANIC CHEMICALS

ELECTROMET Alloys and Metals HAYNES STELLITE Alloys PRESTONE Anti-Freeze

PYROFAX Gas DYNEL Textile Fibers UNION Carbide

EVEREADY Flashlights and Batteries

NATIONAL Carbons

LINDE Silicones

BAKELITE, VINYLITE, and KRENE Plastics